DOCUMENT RESUME

ED 433 736 HE 032 268

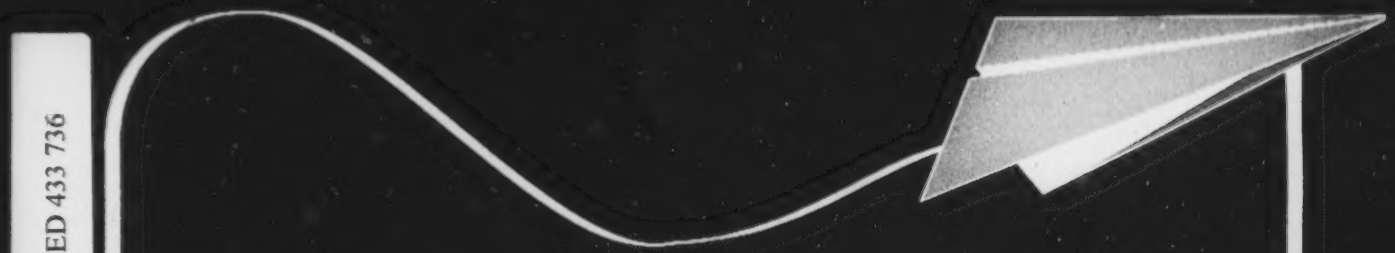
TITLE	Innovations in Master's Nursing Education: New Ways of Learning for the Marketplace. Proceedings of the American Association of Colleges of Nursing Annual Conference on Master's Education (7th, San Antonio, Texas, December 4-6, 1997).
INSTITUTION	American Association of Colleges of Nursing, Washington, DC.
PUB DATE	1998-00-00
NOTE	111p.
AVAILABLE FROM	American Association of Colleges of Nursing, One Dupont Circle, NW, Suite 530, Washington, DC 20036-1120; Tel: 202-463-6930; Web site: http://www.aacn.nche.edu
PUB TYPE	Collected Works - Proceedings (021)
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	Change Strategies; Curriculum Development; Educational Change; *Educational Innovation; Faculty Development; Higher Education; *Masters Programs; *Nursing Education; Professional Education; Teaching Methods

ABSTRACT

This proceedings document presents eight papers given at a 1997 conference on nursing education at the master's degree level. The papers are: (1) "Reality of the Marketplace for Advanced Practice Nursing" (Mary Elizabeth Mancini); (2) "Providing Faculty with the Skills to Teach in a Changing World" (Diane Skiba); (3) "Charting New Territory: Innovative Delivery of a Master's Level Family Nurse Practitioner Program Using the World Wide Web" (O. T. Wendel, Joan Cobin, Karen Hanford, and Jerry Kellogg); (4) "The Essentials of Master's Nursing Education: Where Are We?" (Barbara Tucker and Jan Maville); (5) "Restructuring Master's Education: A Contemporary and Unique Model" (Linda J. Miers); (6) "A Model for Design of a Master's Program with an FNP Track" (Diane Young); (7) "Managed Care Curriculum: An Essential Component of Core Curriculum" (M. Susan Emerson); and (8) "Evolving Roles for Advanced Practice Nurses in the Marketplace" (Julie MacDonald). (Individual papers contain references.) (DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 433 736



New Ways of Learning for the Marketplace

HE 032 208

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

American Assoc of Colleges of Nursing

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

BEST COPY AVAILABLE

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

INNOVATIONS

in

Master's Nursing Education

New Ways of Learning for the Marketplace

Proceedings of the American Association of Colleges of Nursing's Master's Education Conference

December 4-6, 1997, San Antonio, Texas

Copyright ©1998 by the American Association of Colleges of Nursing.

All rights reserved. No part of this book may be reproduced in print, or by photostatic means, or in any other manner, without the express written permission of the publisher.

The views expressed in this book reflect those of the authors and do not necessarily reflect the official views of the American Association of Colleges of Nursing.

Preface

Included on these pages are the presentations (or excerpts of presentations) from the American Association of Colleges of Nursing's seventh annual conference on master's education. These conferences were held in San Antonio, Texas, December 4–December 6, 1997. The theme of the conference was *Innovations in Master's Nursing Education.*

The program presented at this conference was organized by the Master's Education Subcommittee of the AACN Program Committee. This subcommittee is chaired by Barbara A. Durand, PhD, Arizona State University. Other subcommittee members are Mecca S. Cranley, PhD, SUNY-Buffalo (NY); Nancy M. Mills, PhD, University of Missouri-Kansas City; and Regina Williams, PhD, Eastern Michigan University. Anne Rhome is the staff liasion.

TABLE OF CONTENTS

Preface i

Reality of the Marketplace for Advanced Practice Nursing 1
Mary Elizabeth Mancini

Providing Faculty with the Skills to Teach in a Changing World 13
Diane Skiba

Charting New Territory: Innovative Delivery of a Master's Level Family Nurse Practitioner Program Using the World Wide Web 25
O. T. Wendel, Joan Cobin, Karen Hanford, and Jerry Kellogg

The Essentials of Master's Nursing Education: Where Are We? 45
Barbara Tucker and Jan Maville

Restructuring Master's Education: A Contemporary and Unique Model 57
Linda J. Miers

A Model for Design of a Master's Program with an FNP Track 66
Diane Young

Managed Care Curriculum: An Essential Component of Core Curriculum 88
M. Susan Emerson

Evolving Roles for Advanced Practice Nurses in the Marketplace 99
Julie MacDonald

Reality of the Marketplace for Advanced Practice Nursing

MARY ELIZABETH MANCINI, MSN, CAN, *Senior Vice President*
Nursing Administration, Parkland Health and Hospital Systems, Dallas, Texas

IN THIS PAPER I will be discussing the reality of the marketplace for advanced practice nursing. This will include what the marketplace will look like in the future, the key competencies for success in the emerging marketplace, and what academia can do to create a positive future for advanced practice nurses.

To start, I can say without hesitation that I believe that the future for advanced practice nurses such as nurse midwives, nurse anesthetists, nurse practitioners, clinical nurse specialists as well as other master's prepared nurses is bright. I believe, however, we need to accept the fact that the world we have known and loved –for the most part–has ceased to exist. Do you remember admitting patients for GI work-ups and patients admitted for three days to have cataract surgery? In those "good old days", there were few opportunities for advanced practice nurses. We need to accept that for better or worse, those days are gone and we need to move on and create our own destiny or someone else surely will.

Today's Marketplace and How We Got Here

Managed care is the phrase often used to describe today's marketplace. However, the marketplace is really about managing cost first. This is highlighted by data reported in the Journal of Outcomes Management, "Price Versus Quality....Price Wins!" (see Figure 1). This stimulates the question, "Is managed care a threat to our health or an opportunity for health care improvement?" I would say it depends upon your perspective. We need to look at how we arrived at the point where managed care became endemic.

The three most common reasons given for the advent of managed care were cost, quality, and coverage. The cost of health care was, and continues to be, a very real issue. Annual increases in medical costs were raising at double didget rates. However, concerns about quality issues were also considered a force for change.

It is often said that the quality of health care in the United States is the best in the world. I believe that the statement is true, but only if you add the caveat "for those who can

afford to access it." The impact of our culturally and economically heterogeneous population on health status could be seen in the data on infant mortality (see Figure 2). In addition, in 1991, the US Public Health Service reported that only approximately 31% of children were fully immunized at age two. These statistics were worrisome to many.

And what about inappropriate care? In the mid 1990's the Rand Corporation indicated that of the roughly 650,000 hysterectomies performed annually, only 58% were performed for appropriate indications. They reported that two-thirds of all carotid endarterectomies and approximately 20% of the 120,000 people who receive pacemakers annually, underwent the procedures for inappropriate reasons–primarily the failure to evaluate symptoms correctly.

Besides a crisis in cost and quality, managed care was purported to address the crisis in insurance coverage. Reports indicated that too many Americans–more than 41 million, one third of them children–had no health coverage. What impact does this have on health? A government study showed, Americans with family income of less than $9,000 a year had a death rate more than three times that of people with family income of $25,000 or more. Lack of coverage is a reason one in eight women fail to get needed care (see Figure 3) and has been frequently cited as one of the reasons African American males have a death rate three times higher for strokes and two times higher for coronary artery disease than Caucasian males; and why Hispanics are four times as likely to die of complications from diabetes.

And what about patient satisfaction? In 1990, before the major expansion into managed care, a study reported the percentage of citizens in 10 countries who were "well satisfied" with the health care services in their country (see Figure 4). The United States did not top the list. The United States came in at the bottom which indicates to me that once again the status quo, the "good-old days," were not so good as hind sight may make them seem.

Dr. W. Edward Deming says that "There's no law that says anybody has to improve. It's all voluntary. It's only a matter of survival." There are some studies that document the changes that have occurred in environments with high managed care penetration. Figure 5 provides a comparison of clinical efficiency based on the percent of the population under HMO contracts. According to the Advisory Board, caesarean-sections rates in a California capitated group practice averages 16% as compared to the US national average of 24%. Clearly, not everything about managed care is bad.

The Impact of Managed Care on Advanced Practice Nurses: Is it Increasing or Decreasing the Demand and Opportunities for Advanced Practice Nurses?

The answer to the question is, "yes." In some areas there are less jobs available for advanced practice nurses as the emphasis on productivity and through-put of patients increases. Some organizations are decreasing the time providers spend with patients as a means to decrease the cost-per-unit-of-service. However, at the same time, there are more jobs

being created for advanced practice nurses as institutions focus on developing "best practice models."

The Advisory Board, in its review of best practice models, has documented the savings of managing the cost of a routine case episode (e.g., cold, flu) with a primary care physician at $50, a nurse practitioner at $40 and, if managed by a telephone triage nurse, $5. It should be noted that if the patient follows a previously distributed self-care regime, the cost is $1. Regardless, the cost advantage of using appropriate levels of nursing personnel is causing organizations to develop many new and exciting roles for advanced practice nurses.

Another interesting trend is the increase in opportunities within hospital-based/acute care settings for advanced practice nurses. These include the development of acute care nurse practitioner positions. Neonatal nurse practitioners have been use in hospitals for some time. This type of role is now expanding into the adult medical, surgical and obstetrical populations. The number of nurse case managers has also proliferated. They are being used to manage individual patients, teams of patients in the acute care setting, and disease specific populations across the continuum of care.

From my perspective, the bottom line for managed care–actually for quality care–is a new "Five Rights". That is, we need to develop systems that provide the Right intervention, at the Right time, in the Right location, by the Right provider, for the Right cost.

The changing marketplace and the almost schizophrenic nature of health care employment trends point out the need for quality research on the "value" of APN's. In addition, we need to research and document fully allocated cost-benefit analyses of the impact of APN's of various patient populations in various clinical settings. For example, what is the impact of replacing interns and residents with APN's? The changes in reimbursement for medical education provides opportunities for APN's, but at what "cost" to the employing institutions? From an economic perspective, there is an impact to replacing an anesthesia resident who may work an 80 hour work week for less money than a CRNA who typically works closer to a 40 hour work week for more money. This economic cost needs to be compared with the opportunity for improvement in outcomes and the overall quality of care provided given the more reasonable work schedules for most CRNA's and/or the emphasis of CRNA's on patient education. It is imperative that research be conducted that answers these types of questions.

Key Competencies for Success in the Changing Marketplace

I believe there are three general competencies for success in the changing marketplace:

1. Understanding the business you are in.

   Regardless of the role–new graduate or experienced, staff nurse, nurse educator, nurse administrator, nurse in advanced practice–it is critical that everyone understands how the health care business operates. We do our patients (and ourselves) a disservice if we do not understand enrollment, funding mechanisms and authorization requirements

under the managed care concept. Without the context of the business perspective, capitation is only a theoretical concept instead of a principle that drives how and when we take action. Understanding the "business" is not just for the select few anymore. It must be required of everyone.

2. Understanding your unique role.
   To be successful in any endeavor, one must be able to articulate one's unique value to the group or the goal at hand. Unfortunately, many nurses are unable to articulate what they bring to the process from a clinical or economic perspective that no one else can.
3. Accepting accountability and responsibility.
   This competency may be the most important of all. This refers to the willingness to be accountable and responsible for our patients, our actions and ourselves. Although it may be reflective of a societal problem, nurses often deny their own accountability and responsibility. There is an almost pervasive sense of an external rather than internal locus of control. Administration or physicians or colleagues may be held out as the reason actions were taken or not taken. To be successful, we must be willing to be responsible and accountable professionals.

A challenge facing healthcare institutions in the next century will be assisting an essentially homogenous group of health care providers to meet the needs of a culturally diverse society. Therefore, a new competency that is becoming increasingly important is cultural competency. Everyone agrees that this is an important competency, but what is it really? Is it only language skills? Or is it more? How do you develop understanding of another culture? In 1994, Soman defined cultural competency in the context of health care as: "The capacity of individuals or organizations to effectively identify the health practices and behaviors of multiple and diverse populations, to design programs, interventions and services that effectively address cultural and language barriers to the delivery of appropriate and necessary health care services; and to evaluate and contribute to the ongoing improvement of these efforts."

While the need for rapid movement toward the development of a culturally sensitive and competent workforce in the United States is now well recognized, the process of preparing health care workers is still in developing stages within most health care institutions. In Dallas we have developed a community-based, collaborative model for developing a culturally competent workforce with specific reference to working with Hispanic patients. This project is a collaboration between Parkland Health & Hospital system and The University of Texas at Arlington School of Nursing's Center for Hispanic/Latin American Studies in Nursing and Health. The primary goal is to develop cultural competence among current health care providers. Two specific strategies have been implemented. The first strategy is a short-term continuing education cultural immersion program consisting of language and culture learning experiences in Cuernavaca, Mexico, for Parkland health care professionals. The second strategy is the development of a "sister" hospital relationship with

the Instituto Mexicana Seguro Social Hospital (IMSS) in Cuernavaca, Mexico, to facilitate the development of Nurse Exchange Program with Parkland Health & Hospital System.

Another important competency for the success of the nurse in advanced practice is what I refer to as relationship building. It has been said that "Relationships are not important things. They are everything!" and I would agree. The APN is in multiple simultaneous relationships. There is the relationship between the APN and their patient. This is almost always excellent. The relationships between APNs and physicians is also usually excellent. (This is said with a recognition of the occasional problem with credentialing and supervision that does occur.) The relationship between APN's and administration is not always as good. It is not unusual for administration to be seen as "the evil empire". Clearly there are some who are, but most administrators are tying to do the right thing with the constantly fluctuating, often conflicting demands coming from multiple constituencies. As Henry Ford said, "Coming together is a beginning; Keeping together is progress; and working together is success." We need to work on all of our relationships in order to be successful.

There are two other important characteristics for successful relationships: Initiative--a willingness to take the first step, to risk failure or personal embarrassment; and Leadership--the ability to create a shared vision, motivate others, act as a change agent, challenge/question what others consider inevitable. We would all agree these are valuable traits, but are they "teachable"? I do not have the answer, but I must pose the question as to how we can identify and develop these characteristics in advanced practice nurses.

How Can We Do Things Differently: The Role of Faculty In Creating A Positive Future for Advanced Practice Nursing

Someone once said that the definition of insanity is doing the same things and expecting different results. Given this definition, I would say that insanity is endemic in today's health care environment.

Creating the future for advanced practice nursing starts by bringing together academia and service. Russell Akoff said, "The hardest thing for any system to do is face the truth about itself." The truth is, although we speak politely to one another, academia and service rarely discuss substantitive issues and differences of opinions. Most nursing education has been focused on process, but managed care is inherently outcome oriented. Unless we come together we will not be able to create successful practitioners or successful work sites for the provision of quality care. Opportunities for improving the academia and service partnership includes enhancing the communication around the development of new roles and the coordination of clinical practice sites. Specific strategies would involve open and honest dialogue regards the changing health care environment and the resultant changes in the employment supply and demand patterns. Appointments of individuals from the service section to curriculum committees and individuals from the academic section to the nursing

policy and procedure committees at the health care organization would be a good way to start.

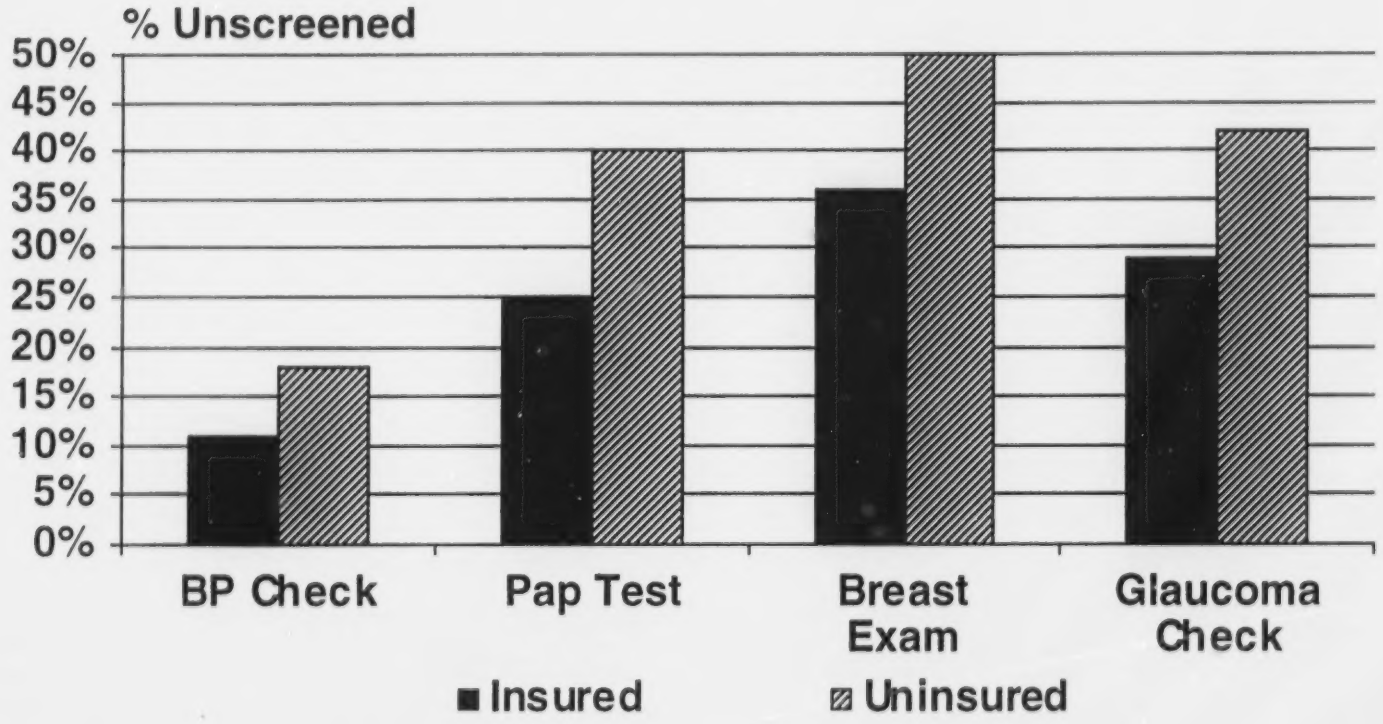
I grant you changing any institution is difficult. However, the challenge to nursing education is to move from preparing the individual nurse to developing interdependent team members. We can only do that together.

How can we accomplish this? I believe role modeling is the key. We need to role model more than the just technical skills. We have to work specifically with the students on balancing the multiple roles and demands that will face them on a daily basis. We can help create the future by helping students recognize the major factors affecting the marketplace and the resultant shifting of work sites. These changes will create many new and exciting professional opportunities if we have the vision to see them. To help APN's create the position of their dreams, we need to help them develop the skills to identify the need that only they can fill. We have to help them articulate the vision, and negotiate the deal. However, we must remember the old adage that in order to improve credibility we need to under promise and over deliver.

Being an effective professional during times of change requries making a commitment to life-long learning. As Arthur Ashe said, "To achieve greatness—Start where you are. Use what you have. Do what you can."

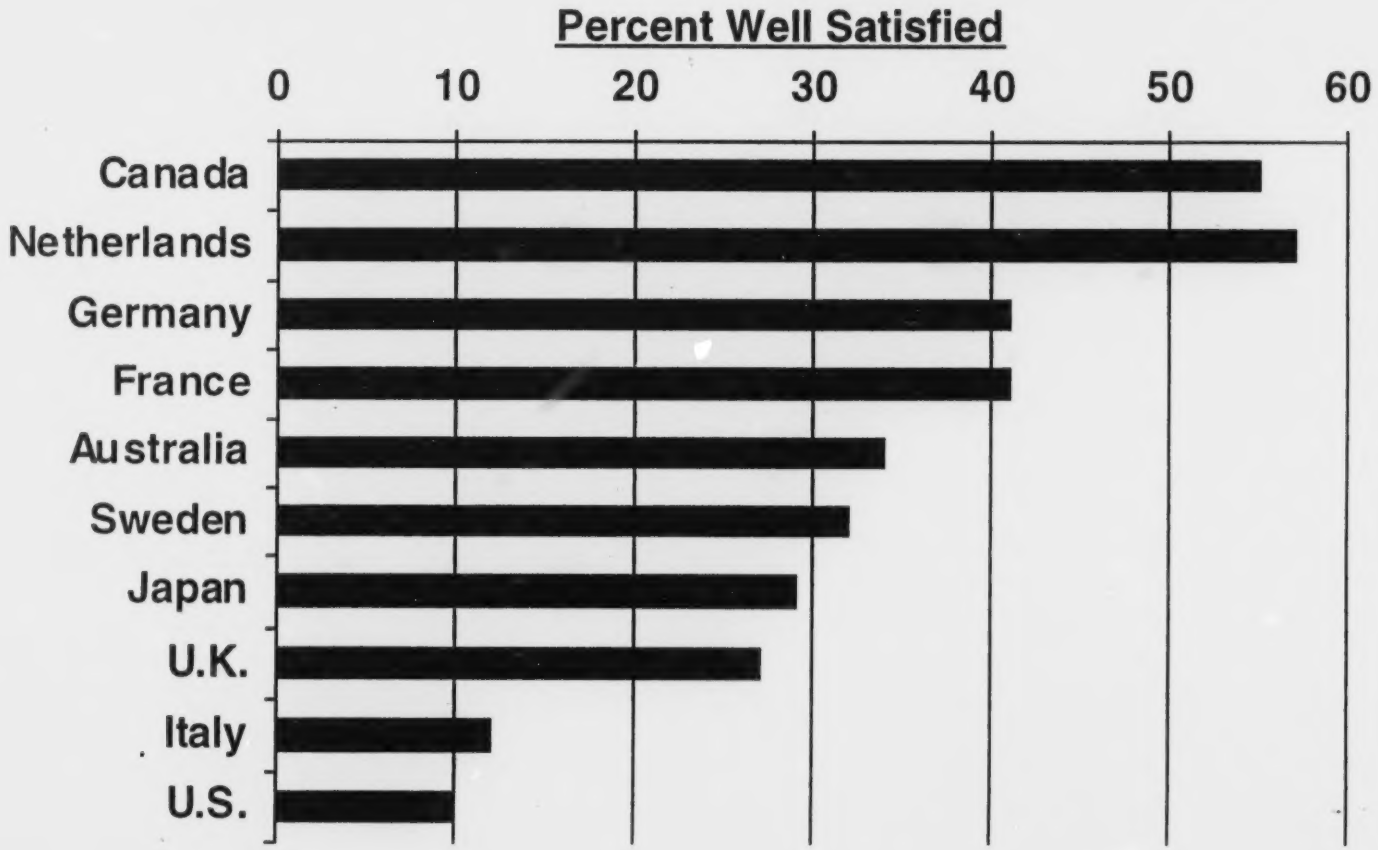
We can do much together.

Lack of Preventive Care for Women 45-65: Insured vs. Uninsured



Source: Woolhandler & Himmelstein: Jama 259:2872

Satisfaction with Health Care in 10 Nations, 1990



Source: Blendon, Health afffairs, 1990 9(2):185

Comparison of Clinical Efficiency

	HMO Percent	Adm/ 1,000	Days/ 1,000	ALOS
Arizona	30%	101	501	5.0
Ohio	21%	124	765	6.2
Tennessee	9%	143	928	6.5

Providing Faculty with the Skills to Teach in a Changing World

DIANE J. SKIBA, PhD, *Associate Dean for Informatics and Director, Learning Technologies*
University of Colorado Health Sciences Center, School of Nursing

HIGHER EDUCATION IS FACING numerous challenges as the new millennium approaches. One challenge is the growing use of learning technologies to provide flexible, engaging and active learning opportunities that transcend geographic and time boundaries. Virtual universities offering learning opportunities rather than seats are populating the higher education landscape. Distance learning plans are the topic of discussion at most major campuses. While administrators and technologists craft plans for the virtual offering of courses, programs and lifelong learning opportunities, faculty are struggling to learn new skills and rethink their traditional lecture courses to web-based multimedia endeavors.

The goals of this article are to provide a context for this changing world of higher education, identify faculty concerns and recommend strategies to convert "chalk & talk" methods to learner-centered on-line courses.

Context

In 1995, the National Center for Education Statistics conducted a survey of two and four years higher education institutions to investigate the extent of distance learning in the United States. The study was requested by the National Institution on Postsecondary Education, Libraries, and Lifelong Learning, U.S. Department of Education. The purpose of the survey was to provide nationally representative data about distance education course offerings in higher education. Distance education was defined as education or training courses delivered to remote (off-campus) locations via audio, video or computer technologies (U.S. Dept. of Education, 1997). Data collection included the following variables: current offerings, plans in the next 3 years, types of technology, sites, enrollments and completion rates, characteristics, program goals and factors keeping institutions from starting or expanding their offerings (U.S. Dept. of Education, 1997). The major findings were as follows:

- 33% of higher education offered distance education
- 25% were planning to include distance learning by 1998
- Public institutions offered the majority of the courses
- Over 25,000 courses were offered in 1994-95 academic year
- 57% delivered by 2-way interactive video
- 52% delivered by one-way pre-recorded video
- 25% delivered via computer-based technologies (internet)
- Over 750,000 students were enrolled
- 25% of the institutions offered degrees exclusively via distance education
- Student access, convenience and reducing time constraints were the goals of most distance education programs
- Program development costs and technology infrastructure were most frequent factors for hindering start-ups or expansions.

Daniel (1997) presented another interesting perspective on distance education in his descriptions of mega-universities through the world. Daniel (1997) claims that higher education "is mired in a crisis that mixes three issues: access, cost and flexibility." The mega-university is defined as a university that teaches at a distance, has at least 100,000 students and is a unitary institution with one campus and hundreds of faculty. What Daniels proposes is that mega-universities throughout the world provide a solution to the access-cost-flexibility problem. His points are simply illustrated in the following chart:

Country	# institutions	#students	annual expenditures	average cost/student
USA	3,500	14 M	175 billion	$12,500
UK	182	1.6 M	16 billion	$10,000
Mega	11	2.8 M	1 billion	$ 350

According to Daniel (1997), the mega-university has an average cost per student of $350 compared to costs exceeding $10,000 for universities in the United States and the United Kingdom.

The Florida Postsecondary Distance Learning Institute (1997) in Florida has drafted six scenarios to strategically position itself for the provision of affordable access to quality higher education. The first three models are new models based upon Daniel's (1997) mega-university, the Western Governor's University and the California Virtual University. The last three models work with existing institutions. For each scenario, cost estimates, legislative or policy changes, positive and negative implications are given. The important point is the

strategic positioning of the state of Florida and its commitment to provide affordable and accessible education to citizens of the state.

Twigg & Oblinger's (1996) report of a joint meeting between Educom and IBM provides a view of what experts predict about higher education. They believe the following about the learning environment in the year 2007 (Twigg & Oblinger, 1996):

- There are fewer higher education institutions.
- Those that remain will deliver high quality programs to defined markets.
- There is more striking differentiation among institutions.
- There are more for-profit educational enterprises
- The geographic hegemony has ended.
- There is global competition.
- More public institutions that offer credit banks & credentialing services.
- Institutions will determine their strengths as content providers or as learning brokers.

To address this crisis in higher education, many are calling for a transformation from a teaching to a learning paradigm (Dolence & Norris, 1995) and the re-examination of the business design of the university (Denning, 1996). Dolence & Norris (1995) believe that higher education must change from a teaching franchise to a learning franchise where learners are the focus rather than providers. They believe the move from the Industrial Age model to the Information Age model will support "just-in-time learning" rather than time-out for education. Dolence & Norris (1995) recommend that the change in higher education should not be a "technology push" but rather a "learning vision pull."

Denning (1996) believes that the business design of the university is obsolete and needs to have a greater orientation towards competence in the educational goals of the university. Denning (1996) new business design includes: course formats that allow students to form learning communities, heavy dependence on the internet and the use of information technologies, research programs integrated in the curriculum, and an educational organization highly responsive to the needs of their consumers. In his glimpse of the future (1997), he believes we need to stop thinking about the internet as merely an information transfer medium but as a mechanism for sustaining learning communities.

In a recent publication, the Commission for a Nation of Lifelong Learners (November, 1997) developed a vision for learning in the 21st century. This commission represents a partnership of businesses, government, education and philantrophy to examine lifelong learning for the adult learner. Their overarching recommendation was that "opinion leaders, education providers, policy makers and the public must recognize that lifelong learning is a national priority." Without a commitment to lifelong learning, the Commission thinks America can not maintain a leadership position in the global economy and cannot provide people with a higher standard of living. The Commission for a Nation of Lifelong Learners (November, 1997) has generated the following recommendations:

- Acknowledge and promote the link between universal lifelong learning and America's position in the global economy.
- Ensure equity of access to lifelong learning.
- Exploit effectively new technologies for lifelong learning.
- Advance lifelong learning by rethinking and reorganizing the delivery of education and training.
- Make resource commitments to lifelong learning commensurate with its national importance.

For each recommendation, a series of implementation strategies is offered with special efforts being targeted by sectors in the business, labor, government, education and philanthropy communities.

Without a doubt, there will be major changes to higher education. Pressures from the discipline itself, consumers and legislative bodies will continue to demand an educational reform.

Reactions and Concerns

One can surmise that the higher education landscape is quickly changing and these changes will place new demands on the faculty. The first demand is on faculty's changing role within this new educational context. The recommendation is that faculty change from a "Sage on the Stage" role to one that is more of "Guide on the Side". Faculty will not longer become sole disseminators of knowledge but will become facilitators or coaches who guide learners. According to Massy (1997), faculty roles will change to mentors or leaders in the learning process. Accordingly, previously held faculty roles (teacher, advisor, assessor, content expert, etc.) will become disaggregated. Massy (1997) projects that faculty may become either developers of courses or courseware (content experts, learning process design expert and process-implementation managers), or presenters of materials, or expert assessors of learning and competencies. Faculty on demand will become an emerging trend according to Massy (1997).

Faculty will need to rethink and reorganize the educational delivery system to accommodate these demands. Faculty will need to shift from a teaching to a learning paradigm that fits with the new business designs of the university (Dolence & Norris, 1995; Denning, 1996). Faculty will need to learn about information technologies and there ever increasing role in higher education. Faculty need to understand that higher education needs to be more productive (Johnstone, 1992) and that instructional software is part of the solution to be more productive (Twigg, 1996). Faculty will need to learn how to effectively use information and communication technologies to support a lifelong learning commitment. The faculty will need to embrace the notion that learning can occur outside the classroom and that the educational system is here to provide learning opportunities not seats in a classroom. Faculty will need to create engaging and interactive learning experiences for

learners rather than promoting passive learning in a lecture hall environment. If faculty try to replicate the traditional campus instruction in their distance learning programs, the more likely it will be a costly venture (Twigg, 1996). Faculty must begin to explore other delivery systems and frameworks to support affordable and accessible learning.

The changing higher education landscape and the demands on both faculty and students have met with mixed reactions. Many faculty have embraced the new learner-centered model. These early adopters have seized the opportunity to create challenging learning possibilities that make extensive use of information technologies. Other faculty have retained passive learning as the predominate educational mode. Students have expressed both positive and negative attitudes toward the changing educational environment. Some students want passive learning and continue to echo the notion..."just tell me what I need to know." Other students are thrilled to have learning opportunities that require their active participation. I would hypothesize that the majority of faculty and students alike are fearful of the change and are seeking opportunities to gain the necessary skills and knowledge to make this educational shift. The majority of the faculty are calling for faculty development to facilitate this role transition and to provide them with the necessary skills and knowledge.

Strategies for Creating a Positive Environment

If we are to succeed in future at higher educational institutions, we must create a positive environment for faculty and students as they struggle with changing landscape. Strategies for creating this environment will need efforts on an individual, institutional, national and federal levels. All must be a part of creating the new business design of higher education. What follows are strategies to facilitate a change from a teacher to learner-centered educational model. This learner-centered model makes extensive use of various learning technologies to create accessible and interactive learning experiences.

Individual Efforts

On an individual level, faculty must become proactive and explore various opportunities to convert "chalk & talk" methods to learner-centered on-line courses. In order to make this conversion, faculty need to become familiar with the newest thinking on the teaching-learning paradigm. There are numerous books and articles written about the shift from the teaching to the learning paradigm. I would suggest starting with Dolence & Norris (1995) book on transforming higher education. Billings (1997) also provides a good starting point for nurse educators and their changing roles. I would also start reading *Change* and *Educom Review*. Both journals contain articles focusing on the changing higher education landscape and learning technologies. Another source I would recommend is the *Handbook of Research for Educational Communications and Technology*, edited by David Jonassen (1996).

This handbook reviews theories of learning from both an objectivism and constructivism viewpoint and provides extensive compendium of various instructional strategies such as cooperative learning, intentional learning, problem-based learning.

Faculty will also need to become technology comfortable. Faculty need to refine their computer literacy skills beyond word processing and being able to conduct a literature search. Faculty will need to become familiar with using the internet for communication and information retrieval. New skills are needed to use electronic communication with students and colleagues. This communication should include both private communications through electronic mail as well as learning computer mediated communication skills for asynchronous interactions. Faculty need to learn how to search the world wide web and learn how to evaluate web resources. Faculty need to have these skills so they can work with students who are actively using the web as a major resource for papers. There are numerous web sites that contain criteria for evaluating web resources and even a White Paper has been written by health care professional organization for evaluating health related web sites. Faculty will also have to become comfortable with multimedia technologies if faculty are going to convert their lectures to something beyond computer slides. Faculty will need workshops on converting courses into new delivery methods and for creating self-directed learning activities.

Denning (1996) also believes that faculty will need to master new skills in listening, trustworthiness, compassion, service, valuing diversity, communication and historical sensibility. Other skills set mentioned by Denning (1996) include inspiring, motivating, managing and coaching students. Faculty will have to learn how to be highly effective teachers that use techniques beyond the classroom presentation and good tests. Faculty development efforts should be targeted to these new skill sets.

Another individual strategy is to get on the web and find faculty development materials offered by many institutions, including your own institution. It is surprising sometimes how little one knows about services in their own university or college. For example, Indiana University has information about its award winning book called *Distance Learning: A Guidebook for System Planning and Implementation*. Excerpts of the book are provided for your viewing. Their web pages also include numerous articles and various faculty experiences with distance learning. The Indiana Higher Education Telecommunications Systems also provides an extensive set of links related to faculty development resources. The Honolulu Community College also provides a faculty development teaching guidebook. Another excellent site is the University of Wisconsin at Madison Learning Technology and Distance Learning pages called DoIT. There are also numerous papers available on-line related to electronic conferencing, on teaching and learning and the On-line Report on Pedagogical Techniques for Computer-mediated Communication.

At the University of Colorado, a multi-method approach is used for faculty development. The campus wide Office of Education provides mini-courses on a variety of topics, maintains an extensive collection of web resources and offers a faculty mentoring program. In the School of Nursing, a series of brown bag seminars and an on-line course is available to all faculty. The faculty development series was developed using our web-based

authoring system, *WebCT* (Skiba, 1998). The series is a group of modules constructed as an on-line course about developing an on-line course. The first module is a review of internet and world wide web skills for those faculty who are not comfortable with the on-line world. The second module is called getting stated with on-line courses and include three sections: what's available, comparing on-line courses with other delivery methods, and steps in the instructional design process. The third module focuses on adapting your course for distance delivery. It includes the following sections: determining the learning competencies for your modules, learning activities to achieve outcomes, and matching your learning activity with an appropriate delivery method of technologies. The fourth module focuses on the various instructional tools available on *WebCT*. The last module will concentrate on learner assessment techniques and evaluations.

Institutional Efforts

On a institutional level, universities must begin to develop technologies strategies that incorporate an investment in human and technology infrastructures. Daniel (1997) believes that universities will fail if they respond in their usual way to change...let individual faculty members "do their own thing." What is needed is a university wide technology strategy. The basis of this strategy is "to identify, in light of core competencies, the student's technology based instruction will serve and the programs it will deliver" (Daniel, 1997). To summarize his major points, Daniel (1997) stated that "technology can raise productivity, but only through a reorganization of the teaching-learning process based on the development of a technology infrastructure." He believes that the essence of the university can be ensured through a good technology strategy.

Daigle and Jarmon (1997) believe that faculty development is the cornerstone of building a campus infrastructure. It is an important component of building and maintaining human capital. They believe intellectual capital is as important as physical and technical capital and should be strategically managed and planned in an institution of higher education.

The following statements exemplify their assumptions of faculty development programs:

- Faculty development programs focused on technology should seek to become part of the fabric of the institution and agents for transforming it.
- Faculty development should become as much a part of faculty work as teaching and research.
- Faculty development assumes change, movement and a value added experience.
- Faculty development must be convenient and on-demand assistance.
- Faculty development on technology should have the ultimate goal to make faculty self-sufficient, just-in-time, lifelong learners.

Guiding principles for faculty development were crafted at a recent meeting of Educom's National Learning Infrastructure Initiative. The following guiding principles were proposed:

- Faculty development must be integrally related to the institutional mission.
- Strategic faculty development initiatives should be based on empirical data linking technology to student learning outcomes.
- Strong faculty development strategies employ a collaborative model that draws upon multiple segments of the campus and wider higher education community.
- As technology transforms the teacher-learner relationship, faculty development programs must be seen as part of the infrastructure needed to serve students of the future as well as those presently enrolled.
- Assessment of success must be both measurable and ongoing with stated objectives.

In Twigg (1996) report on academic productivity and instructional software, she reports on the One Percent Solution. To change an entire organization is very difficult, the One Percent Solution offers a strategy to focus institutional commitment. The strategy is to focus on changing one percent of the courses within an institution. According to this article, several universities, in particular Maricopa Community College, found that 44% of its student body was enrolled in 25 courses out of a possible 2,000 courses. If one follows the One Percent Solution, one needs to rethink faculty development efforts. The question becomes, does one focus faculty development on the faculty or only on the faculty who teach the majority of the enrolled students? Each institution, particularly the specific college or school of nursing must grapple with this question based upon their own data.

National Efforts

On a national level, there is a limited number of efforts in nursing education. Professional organizations, like AACN, are holding conferences on distance learning topics. There are also individual schools, such as Indiana University and regional organizations, such as Western Institute in Nursing, offering courses and continuing education programs for school of nursing faculty. There is no single nursing organization that is facilitating the numerous issues around distance learning. There are organizations such as the American Association of Higher Education and National Learning Information Infrastructure at Educom that are tackling the issues of faculty development, cost models, copyright and intellectual property, and accreditation concerns. What is needed in nursing is their active participation in these groups and in nursing professional organizations. Nursing's professional organizations must begin to vision the future of nursing education and how it can help nursing institutions to strategically position themselves for the future. The organizations must begin to re-examine accreditation in light of educational transformation. What will

accreditation mean in the future when public institutions will be competing with for profit educational enterprises and the market is divided among content providers, knowledge brokers and credentialing services? The nursing profession must begin to address these issues. Can nursing begin to implement new business designs for their schools or colleges? (Skiba, 1997).

Federal Efforts

At the federal level, there have been many dollars allocated for the development of a variety of distance learning programs. Numerous grants include the use of two way interactive video to reach rural audiences and now are using web-based course methodologies. Some schools are using exciting new and innovative techniques while others are repacking their traditional course materials and making them available. The talking head syndrome exists for many distance learning sites using two way interactive video. The webizing of lecture notes and powerpoint slides are also populating cyberspace. The use of traditional assessment and evaluation techniques are common. What is needed is an overall evaluation of distance learning. We need to begin to gather evidence to support the practice of distance learning. We need to develop new assessment and evaluation techniques that correspond to the shift from teacher to learner-centered education. In essence, we need some dollars to be allocated to these issues. From a faculty development perspective, we need some contracts awarded to support these endeavors. We need to work with private partnerships and regional professional organizations to create effective and efficient faculty development materials. We need ensure that our faculty have a foundation for this educational transformation

Summary

Without a doubt, the landscape of higher education is changing rapidly. In nursing, we need to respond to the change so that schools of nursing will be strategically positioned for the future. One key element is to invest in our faculty to support this change process. Each school needs to invest in its human infrastructure to ensure that faculty have the necessary knowledge and skills to usher in this transformation. It is imperative that these efforts begin now before schools of nursing begin to close. Faculty preparation must begin with individuals taking the first steps and begin their own individual efforts. If faculty do not perceive the need for these efforts then it is doubtful that institutional efforts will have an impact. Institutional efforts must be planned for those faculty who are committed to the change process. National and federal efforts need to compliment institutional efforts and begin to tackle the pressing issues that transcend institutions and affect the nursing profession.

References

A Glimpse into the Future with Peter Denning. (1997). *Educom Review*, 32 (4), 14-24.

Billings, D. (1997). Issues in teaching and learning at a distance: Changing roles and responsibilities of administrators, faculty and students. *Computers in Nursing*, 15 (2), 69-70.

Commission for a Nation of Lifelong Learners. (November, 1997). *A Nation Learning: Vision for the 21st Century*. Albany, NY: Regents College.

Daigle, S. & Jarmon, C. (1997). Building the campus infrastructure that really counts. *Educom Review*, 32 (4), 35-38.

Daniel, Sir John (1997). Why universities need technology strategies. *Change*, 29 (4), 10-17.

Denning, P. (1996). Business designs for the new university. *Educom Review*, 31 (6), 20-30.

Dolence, M. & Norris, D. (1995). *Transforming higher education: A vision for learning in the 21st century*. Ann Arbor, MI.: Society for College and Unviersity Planning.

Florida Postsecondary Distance Learning Institute (December 23, 1997). Florida Post-secondary Distance Learning Scenarios.
(http://sun6.dms.state.fl.us/institute/Scenarios.html).

Johnstone, D. Bruce (1992). *Learning Productivity : A New Imperative for American Higher Education*. Studies in Public Higher Education. State University of New York. As cited in C. Twigg (July 24-25, 1996). Academic Productivity: The Case for Instructional Software **(http://www.educom.edu/program/nlii/keydocs/broadmoor.html).**

Jonassen, D. (1996). *Handbook of Research for Educational Communications and Technology*. New York: Simon & Schuster Macmillan.

Massy, W. (1997). *Life on the wired campus: How information technology will shape institutional futures*. In Diane Oblinger & Sean Rush (Eds.), *The Learning Revolution*, Bolton, Ma: Anker Publishing.

Skiba, D. (1997). Transforming nursing education to celebrate learning. *Nursing & Health Care Perspectives*, 18 (3),124-129,148.

Skiba, D. (1998). *Faculty Development Series: Creating On-line courses in nursing education.* **(http://freenet.uchsc.edu:8900).**

Twigg, C. (July 24-25, 1996). Academic Productivity: The Case for Instructional Software **(http://www.educom.edu/program/nlii/keydocs/broadmoor.html).**

Twigg, C & Oblinger, D. (November 5-6, 1996). The Virtual University. **(http://www.educom.edu/nlii/VU.html).**

U.S. Department of Education (1997). National Center for Education Statistics, *Distance Education in Higher Education Institutions.* NCES98-062, by Laurie Lewis, Debbie Alexander, and Elizabeth Farris. Bernie Greene, Project office. Washington, DC. **(http://nces.ed.gov/pubs98/distance/98062-1.html).**

Web Resources

Bill of Rights and Responsibilities for Electronic Learners. American Association for Higher Education. **(http://www.aahe.org/technology/tltr-bor.htm).**

Chickering, A. & Ehrmann, S (1997). Implementing the seven principles: Technology as lever. **(http://www.aahe.org/technology/ehrmann.htm).**

Effectively using electronic conferencing. **(http://indiana.edu/ ~ecopts/ectips.html).**

Elder, L. & Paul, R. (1997). *Universal Intellectual Standards.* **(http://www.sonoma.edu/CThink/K12/k12library/unistan.nclk)**

Enabling the Distance Learner: A Strategy for Success. **(http://www.DISTANCE-EDUCATOR.com/Editorial_1.2.html).**

Ehrmann,S. (1997). The Flashlight Project: Spotting an elephant in the dark. **(http://www.aahe.org/technology/elephant.htm).**

Indiana Higher Education Telecommunications System. Faculty Development Resources. **(http://www.ihets.org/IPSE/facdev.html).**

Indiana University **(http://www.indiana.edu/~iudisted/dlresources/).**

Paulsen, M. (1995). The Online Report on Pedagogical Techniques for computer mediated communication. **(http://www.hs.nki.no/~morten/cmcped.htm).**

Strategies for Learning at a distance. Guide #9 October 1995. **(http://uidaho.edu/evo/dist9.html).**

Strategies for teaching at a distance. Guide #2, October 1995. **(http://www.uidaho.edu/evo/dist2.html).**

University of Colorado Office of Education. **(http://www.uchsc.edu/chancllr/offedu/).**

University of Wisconsin at Madison. Teaching Improvement/Faculty Development. **(http://www.wisc.edu/learntech/grp/tifd.htm).**

Charting New Territory: Innovative Delivery of a Master's Level Family Nurse Practitioner Program Using the World Wide Web

O.T WENDEL, PhD, *Chancellor*
JOAN COBIN, RN, PhD, FAAN, *Education Consultant*
KAREN HANFORD, RN, MSN, FNP, PA-C, *Program Director*
Western University of Health Sciences, Chico, California
JERRY KELLOGG, MA, *Instructional Designer, Creative Edge*

THE CONCEPT OF DISTANCE EDUCATION has existed for centuries. Until recently, the vehicle for communication between student and instructor involved the transmission of work using predecessors of the modern mail system. Traditional, classroom-based education has dominated the educational culture of the 20th century. Only a very small percentage of students have been given the opportunity to pursue their education at a distance from the conglomeration of classrooms, instructors, athletic fields and libraries that are identified with today's institutions of higher learning.

Recent developments in information dissemination now offer these institutions an unparalleled opportunity to broadcast education to new populations of students. Not only do students and instructors have a full range of media available for the exchange of information (i.e., audio, video, and print), they can transmit this information over established communication systems such as television channels or phone lines.

In January of 1997, the Western University of Health Sciences at Chico initiated a master's level family nurse practitioner program that takes advantage of these new distance learning technologies. Using the World Wide Web as the predominant educational delivery vehicle, the program is designed to accommodate the requirements of adult, professional learners. The two-year curriculum is divided into eight terms with an average of four courses offered in each term. In addition to completing a variety of on-line activities, students are required to participate in 16

residential weekend seminars as part of the curriculum. The educational experience was designed to meet both institutional and learner needs and includes several different instructor-student and student-student types of interaction.

In the following sections we present the initial planning issues, development framework, curriculum organization and operational aspects of the FNP curriculum, as well as the impact of a distance learning approach on the institution as a whole. By sharing these experiences, we hope to encourage similar efforts and promote a greater understanding of the elements that need to be considered in order to create a successful web-based curriculum.

Institutional Environment

Located in Pomona, California, the Western University of Health Sciences (formerly College of Osteopathic Medicine of the Pacific) is one of 17 colleges of osteopathic medicine in the U.S. WesternU graduated its Charter class of 36 students in 1982, and is currently the major provider of family practice physicians in the United States.

WesternU expanded its educational offerings over the next two decades and now has programs for health professional educators, physician assistants, physical therapists, pharmacists and family practice nurse practitioners. In 1993 WesternU was recognized as an Academic Health Center and in 1995 formed the Academic Center of Excellence in the Health Sciences in cooperation with the San Bernardino County Medical Center.

In March 1996, WesternU was granted accreditation by the Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges (WASC). Five months later, on August 9, 1996, WesternU officially changed its name to the Western University of Health Sciences to reflect the expanded mission of the institution.

The Nursing Opportunity

Changes in the health care system have forced many nurses to pursue advanced education. Acute care, hospital-based nursing populations have been decreasing in recent years and the health care delivery system has begun to emphasize outpatient services and primary care. The ability for nurses to transition to careers that fit future projections of manpower need is dependent on their access to advanced (post-baccalaureate) education.

Many nurses have the prerequisites to pursue an advanced practice nursing credential but cannot afford to leave their homes to take advantage of this opportunity. These potential students find significantly difficulty in rearranging their lives to accommodate the demands of classroom-based educational experiences. These difficulties are further magnified in rural areas where large distances separate students from campuses with advanced nursing programs. Paradoxically, it is these rural areas that would benefit the most by the presence of nurses with advanced practice credentials.

Based on a recognized need for advanced practice nurses in rural areas of Northern California and Southern Oregon, WesternU saw an opportunity to offer a distance learning alternative to nurses that would not otherwise have the opportunity to pursue advanced education. As early as 1994, the University's plans for expansion centered on three primary goals:

1. To develop a rural focus campus
2. To take advantage of partnerships to eliminate the creation of redundant resources
3. To use state-of-the-art technology to meet program and student needs for quality education

In addition to addressing a specific regional manpower need, the choice of nursing as a focus for institutional expansion and program development was a logical one for two other reasons. First, as a key member of the health care team, nurses are key to the success of health care reforms and are in increasing demand to provide comprehensive, collaborative primary and specialty care for individuals, families, and communities in a variety of settings. Second, WesternU recognized the need for a strong voice within the Academic Health Center and a visible presence within the institution's faculty and student body.

These plans for expansion became a reality when WesternU established a regional campus, located in Chico, California, and enrolled its charter class in the Master of Science in Nursing/Family Nurse Practitioner Program in January 1997.

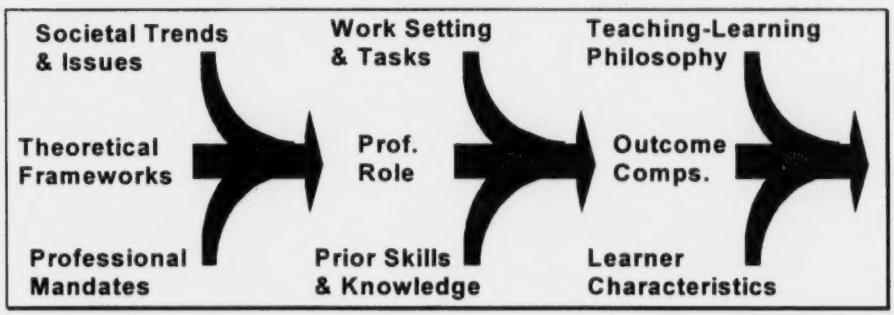
BEST COPY AVAILABLE

Developmental Framework

Planning for Distance Learning

> If you work as a professor in a conventional, material, traditional, university and you read a description of a virtual university, then what you do next is a letter-perfect portrayal of the word "ambivalence."
>
> You cheer; you shudder; you applaud; you despair; you think, receptively and flexibly, of the ways that electronic media could add to your teaching effectiveness; and you think, defensively and crankily, of the ways in which your profession and calling seem to be entirely and wholeheartedly misunderstood by experts and business people who are designing the virtual university-and you manage to fit all of these reactions into the space of a minute or two.
>
> Patrick Nelson Limerick, *USA Today*, Sept. 30, 1997

To meet the challenge of providing career mobility for a large population of health care professionals, Western University of Health Sciences began its planning efforts by considering the traditional barriers to educational access and success that confront working health care professionals. They also considered the needs of the nursing profession and the broader needs of society at large, as well as the theoretical frameworks that currently guide the delivery of health care.



From these initial considerations, the professional role of the family nurse practitioner was defined. When examined in the context of practice settings, behaviors, and prerequisite knowledge/ skills across the continuum of health care, this role description provided the basis for identifying the outcome competencies of FNP

graduates. These competencies reflected the criteria established by the state's Board of Registered Nursing for advanced practice nurses in California. They also reflect the guidelines for the educational preparation of advanced practice nurses established by the American Association of Colleges of Nursing (AACN) and the National Organization of Nurse Practitioner Faculties (NONPF).

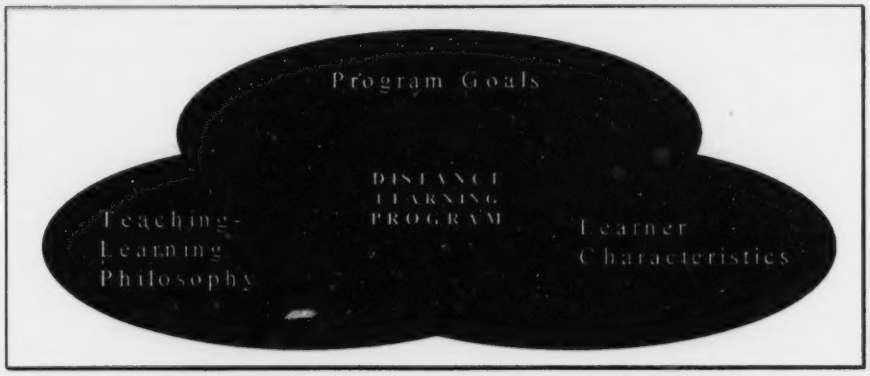
Outcome Competencies of WesternU's FNP Graduates

As candidates for state and national certification for advanced practice, graduates of the program will be able to:

- Utilize knowledge from the areas of physical, social, nursing, and medical science research and practice to provide direct client care commensurate with the professional and legal parameters of the Nurse Practitioner role.
- Provide individualized direct care within a rural, independent practice setting that reflects acceptance of the diversity of social values and beliefs among clients in various communities.
- Demonstrate comprehension of national and local public policy related to health care standards, health care systems and financing when planning and providing health care for rural individuals, families and communities.
- Enhance client collaboration and compliance for desired health care outcomes using intellectual skills derived from theories of learning and communication, as well as critical thinking and ethical decision-making.
- Integrate health promotion, illness prevention, and health maintenance strategies into services provided to individuals, families and communities.
- Evolve as self-directed and motivated practitioners of advanced nursing who participate in the development and utilization of new nursing knowledge to further develop the social and professional role of the family nurse practitioner.

In addition to knowledge of professional/societal needs and the nature of the target learners, WesternU planners drew on their knowledge of adult learning theory to develop a viable distance education program. The program design had to be based on a teaching-learning philosophy that recognizes adults as skilled learners, who come to

the learning environment with specific goals and are ready to take responsibility for their own success in the program. To assist learners in achieving their educational goals, the curriculum had to provide clear statements of expected outcomes and realistic learning activities, which can lead to desired, measurable, professional behaviors.



Given this philosophical foundation, WesternU then sought an educational medium that would provide this kind of assistance in a way that would break the traditional barriers to educational access and success. According to Cross (1981), these barriers include institutional, situational, and dispositional barriers.

Institutional barriers include procedures and practices that discourage adult learners. These include admission and transfer or credit policies, class scheduling, and access to necessary services such as library or counseling.

The education medium selected for the FNP program had to incorporate an infrastructure that would provide assistance on demand, regardless of geographic distance. Admission policies had to be flexible enough to accommodate a variety of educational and professional experiences, and allow for individualized arrangements based on these varied life experiences.

Situational barriers include obstacles arising out of one's situation in life at a given time. For example, children needing care or supervision, transportation to classes or learning facilities, financial constraints, etc.

To minimize these situational barriers, WesternU sought a delivery medium that would provide instruction, as

BEST COPY AVAILABLE

much as possible, at a time and place most convenient for each individual learner. Financial aid options would also be provided to reduce the impact of program costs.

Dispositional barriers frequently pose greater obstacles to returning to school than either institutional or situational barriers. Almost all adult learners struggle at some point with concerns such as time management, self-discipline, lack of confidence and fear of the unknown.

To mitigate the effects of these personal barriers, a variety of learning strategies were designed to promote interstudent solidarity and teacher-student interaction. The development of support systems to help students succeed in the program was considered a high priority.

WesternU ultimately selected the Internet as the vehicle of choice for delivering the FNP program. The World Wide Web offered several advantages as a distance learning medium:

1. It met many of the distance learner needs described above
2. It virtually eliminated geographic distance as a barrier to educational mobility
3. It encouraged the efficient use of resources, both for students and faculty
4. It provided exposure to a type of professional activity which is being used more and more in the health professions

While logistical considerations and WesternU's teaching-learning philosophy provided the basis for selecting the educational delivery system, the instructional design process ensured that the distance learning curriculum incorporated the essential elements that met learner needs, institutional goals, and available resources.

Curriculum Design Elements

The following elements were considered critical to the success of the FNP program, and were therefore incorporated in the curriculum design:

- **Competency-based learning outcomes.** Performance-based measures of success are crucial to ensure that program graduates will be able to execute the required functions of their new role. Assessment focuses on what students can actually do, not simply on what they know.

- **Self directed learning activities.** While learning objectives establish the goals for the students' learning efforts, how they reach these goals is up to them. This is more consistent with the view of adults as independent thinkers who come to the learning environment with considerable experience and skill as self-directed learners. Assistance can be provided in the form of options, suggestions, and access to strategic resources.

- **Performance standards for essential intellectual skills.** Graduate programs must provide opportunities for the development of intellectual skills considered critical for professional practice. For this reason, the curriculum should incorporate learning experiences that encourage frequent practice in research, oral and written communication, and critical thinking/analysis.

- **Knowledge and skill integration across the curriculum.** Just as advanced practice nursing is by nature a holistic, integrative profession, the curriculum designed to prepare such professionals must be a holistic, integrative learning experience. Rather than present content in discrete, self-contained courses that occur at a single point in time, the curriculum is divided into modules that are progressively delivered over the duration of the program. This parallel delivery pattern presents unique opportunities to integrate content from several courses during a given term.

Course/Term	1	2	3	4	5	6	7	8
Strategies for Success	500 1 unit							
Health Systems		510.1 1 unit				510.2 1 unit		510.3 1 unit
Nursing Theory		520.1 1 unit	520.2 1 unit		520.3 1 unit			
Nursing Research	530.1 1 unit			530.2 1 unit	530.3 1 unit		530.4 1 unit	
Pathophysiology	540.1 1 unit		540.2 1 unit		540.3 1 unit		540.4 1 unit	
Pharmacology		550.1 1 unit		550.2 1 unit		550.3 1 unit		550.4 1 unit
Role Development	560.1 1 unit	560.2 1 unit	560.3 1 unit	560.4 1 unit	560.5 1 unit	560.7 1 unit	560.7 1 unit	560.8 1 unit
Clinical Experience	570.1 2 units	570.2 2 units	570.3 2 units	570.4 2 units	570.5 2 units	570.6 2 units	570.7 2 units	570.8 2 units
Total Units	**6 units**	**6 units**	**5 units**	**5 units**	**6 units**	**5 units**	**5 units**	**5 units**

- **Problem-based learning as a collaborative learning exercise.** Curriculum planners recognized that the some of the best self-directed learning experiences occur not in isolation, but in collaboration with colleagues who have similar professional and educational goals. Students assigned to work groups at the beginning of the program are asked to apply their collaborative problem-solving skills each term toward the resolution of a given clinical or professional problem, one that requires them to integrate knowledge gained from concurrent modules and their own collective experience.

- **Extended academic year.** To accommodate the schedule constraints of working students, a non-traditional academic year was needed. Each year of the two-year program is divided into four eleven-week terms (22 weeks total). This schedule provides more time during each academic year and allows students to complete the equivalent of a full time study load while attending school part-time..

- **Role transition emphasis.** A major consideration in devising outcome performance expectations was the entry level knowledge and skills of incoming students. Curriculum planners realized that the FNP role is distinguished less by what the FNP knows as what the FNP *does* with that knowledge, i.e., make medical decisions within a nursing framework. The curriculum was designed to reflect the shift in emphasis from knowledge acquisition to knowledge application.

- **Computer based teaching/learning strategies.** As an integral part of the distance education delivery system, students are required to develop a certain competence and comfort level with computers and the Internet. The curriculum includes a variety of strategies to help students get up to speed quickly and then strengthen their computer skills as they progress in the program.

- **Campus-based performance validation seminars.** Seminars are integrated into the curriculum as a residential experience to allow students time away from other roles and to nurture their interdependent relationships with colleagues. The seminars also provide opportunities to validate learning through discussions, presentations and one-to-one meetings with professors.

Essential Components of Program Delivery

In addition to the design elements described above, other elements were considered crucial to the program's implementation and continued success.

- **Instructional designer.** One role that is essential to assure program integrity during the development phase is the instructional designer. The instructional designer also has an ongoing role in maintaining program currency and other ongoing quality improvement issues. The instructional designer may also be a content expert, but it is rare to find someone with both sets of skills.

- **Teacher training.** Essential to the success of the program are the instructors that must guide, assess, and interact with students at a distance. Because few instructors have had a model for the kind of non-traditional teaching role required in a distance learning program, each new faculty member receives a comprehensive instructor guide and participates in a scheduled training session. This training includes an introduction to electronic communication and evaluation and other aspects of the instructor role.

- **Learning resources.** In addition to providing access to traditional information resources through the campus library, the FNP program emphasizes the use of the Internet as a research tool. Built-in links to CINAHL and other relevant online resources put a wealth of electronic information quite literally at the learner's fingertips.

- **Systematic curriculum review and revision.** Program currency and relevance is maintained through a regular schedule of course reviews/revisions that incorporates both faculty and student input. The systematic approach ensures a respect for the interrelatedness of program elements and minimizes random changes based on individual preference.

Operationalizing Program Delivery

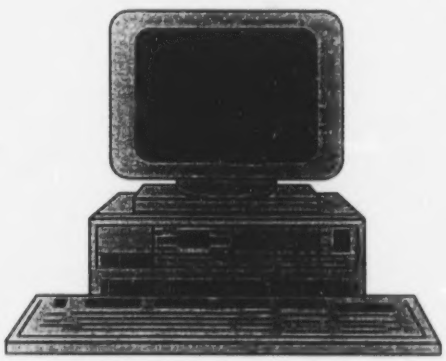
Admission Requirements

To qualify for admission to WesternU's MSN-FNP program, students must have the following:

- Bachelor of Science in Nursing from an accredited nursing program.
- GPA of 3.0 overall in last 60 semester units or 90 quarter units
- Coursework in biochemistry and statistics or equivalent
- Registered Nurse (RN) licensure in the state where preceptored clinical hours will be completed

Students admitted to the program must obtain the equipment necessary for Web site access. To maximize developmental efficiency and minimize the technical difficulties involved in supporting multiple platforms, the decision was made to establish specific system requirements:

- PC System - 486 or better
- Modem - 28.8 baud or better
- Internet Explorer 3.0 or better
- Windows 95
- Sound Card
- MS Word 6.0, WordPerfect or compatible alternative
- Printer
- Any Internet service provider - flat rate recommended



The Curriculum

The FNP curriculum consists of 43 semester units of instruction and clinical experience. 32 units must be completed in residence. Courses include:

FNP 500 Strategies for Success in the FNP Program (1 unit)
FNP 510 Health Systems (3 units)
FNP 520 Nursing Theory (3 units)
FNP 530 Nursing Research (4 units)
FNP 540 Pathophysiology (4 units)
FNP 550 Pharmacology (4 units)
FNP 560 Primary Care Role Development (8 units)
FNP 570 Primary Care Clinical Experiences (16 units)

Each student will spend approximately 45 hours per credit for theory courses over each eleven week block to complete learning activities. Approximately 90 hours per credit for clinical courses is expected over each eleven week block (8 hours per week).

Off-campus vs On-campus Activities

While WesternU's World Wide Web interface reduces the amount of time students spend on campus in order to attend traditional classes, the FNP program does require participants to meet for a residential weekend seminar twice each term. These seminars occur on the third and ninth weekend of each 11-week block, and are scheduled well in advance to assist students in planning their travel schedules.

The proposed format is a weekend of study beginning Friday evening and ending Sunday afternoon (15 to 17 hours of interaction among instructors and students). The following outlines a typical schedule for a typical seminar weekend. Because of the unique facilities at the Chico campus, overnight lodging and meals are provided for minimal cost.

Friday	Saturday		Sunday	
	8-10 am	Course 1 Seminar	8-10 am	Course 3 Seminar
	10-1 pm	Student-Faculty Mtgs., Learning Lab, Group Mtgs.	10-1 pm	Student-Faculty Mtgs., Learning Lab, Group Mtgs.

	1-3 pm	Course 2 Seminar	1-3 pm	Course 4 Seminar
	3-6 pm	Student-Faculty Mtgs., Learning Lab, Group Mtgs.	3-6 pm	Student-Faculty Mtgs., Learning Lab, Group Mtgs.
7-8:30 pm				
8:30pm Social Time				

Preceptored Clinical Experiences

Clinical experiences are an essential part of any Nurse Practitioner program. For this reason, WesternU's FNP curriculum includes a strong clinical component which is jointly facilitated by Clinical Instructors and Preceptors in participating health care agencies. Except for the distances involved in site visitation, the preceptored clinical experiences are implemented in a relatively conventional manner.

Each term, an FNP 570 module is scheduled to provide students with an opportunity to apply their learning in the clinical work setting. Students are supervised by a local preceptor who is responsible for assuring that the student is provided with adequate and appropriate learning experiences as close to home as possible. This partnership between the academic and clinical settings not only results in a better-prepared family nurse practitioner, but positions the student for more advanced employment opportunities as they arise.

Preceptors are selected based on their preparation, experience and level of expertise in primary care practice, as well as their ability and willingness to assist the student in obtaining learning experiences appropriate for meeting the requirements for each clinical module. The preceptor functions on a voluntary basis, acting as a resource person, evaluator, consultant and guide as well as a clinical role model for the student. The preceptor also ensures that the learner is exposed to clinical experiences that integrate learning from all concurrent modules.

Collaborative Learning Exercises

Each term, as a member of a Collaborative Group, the FNP student completes a problem-based learning exercise that integrates concepts based on the unique configuration of modules offered during that term. These collaborative problem-solving activities are part of the grading scheme for the first six FNP 560 modules (Primary Care Role Development 560.1 - 560.6). Their purpose is four-fold:

1. They integrate concepts from different yet related courses that enriches the content and learning experience for each course;

2. They allow for the presentation of multifaceted problems that reflect the complexity of real-world situations;

3. They provide an opportunity for students to exercise research, analysis, problem-solving, collaboration, communication and leadership skills;

4. They provide a continuous support group to enable distance students to help each other complete the program.

The problem, which is based on the objectives for all modules being offered that term, is assigned in the appropriate FNP 560 module before the students convene for the first seminar. The assignment provides enough documentation to explain the problem, but does not provide the resources necessary to resolve it. Depending on the nature of the problem, students may be required to analyze a multifaceted health care problem, devise a care plan, or describe a program to meet a need. It is the group's collective responsibility to identify and obtain the necessary resources to complete the project.

Culminating Experience

During the last two terms, the collaborative exercises are replaced by a independent project that each student is required to complete prior to graduation. This culminating experience is based on the identification and development of a clinical improvement project that will benefit their practice setting. They receive additional details on how to complete this project through the Nursing Research course that begins in Term 2.

Faculty Role Transition and Responsibilities

In a distance learning program, where the emphasis on self-direction shifts the responsibility for learning from the institution to the student, the traditional role of the learner is substantially altered. This view of the adult distance student as a self-directed learner has a major impact on the traditional role of the instructor, who becomes less authoritarian and more collaborative in the learning environment. The greater the dependence on learner self-direction, the greater the change in the instructor role from that of the teacher to that of facilitator.

The following are the major role functions and responsibilities of the FNP instructor:

- **Seminar Attendance and Leadership.** Seminar weekends at WesternU are designed as intensive residential experiences to allow students to disengage from other life roles. For this reason, it is important for both students and instructors to attend the entire seminar weekend. Students and faculty are expected to be on-site for the duration of the weekend.

- **Discussion Participation.** Instructors are required to monitor and participate as needed in online discussions. The instructor's input may be needed to stimulate, clarify, or guide the direction of the discussion. The instructor must also evaluate each student's online participation in order to determine his or her final grade.

- **Individual Student Contact.** . It is very important for instructors to respond promptly to individual student inquiries and concerns. While a distance learning program can offer students a more convenient method of learning, it can also produce a feeling of detachment from the subject matter and a sense of isolation from their instructor and fellow students. These feelings are exacerbated when student inquiries by phone or e-mail go unanswered for a prolonged period

- **Assessment and Grading.** Because this is a competency-based program, student performance is evaluated against pre-established criteria rather than other students' work. In addition, students are expected to meet a minimum level of performance to obtain credit for any given assignment.

- **Collaborative Work Group Observation.** All instructors are required to help monitor collaborative work groups during the weekend seminars and provide guidance as necessary.

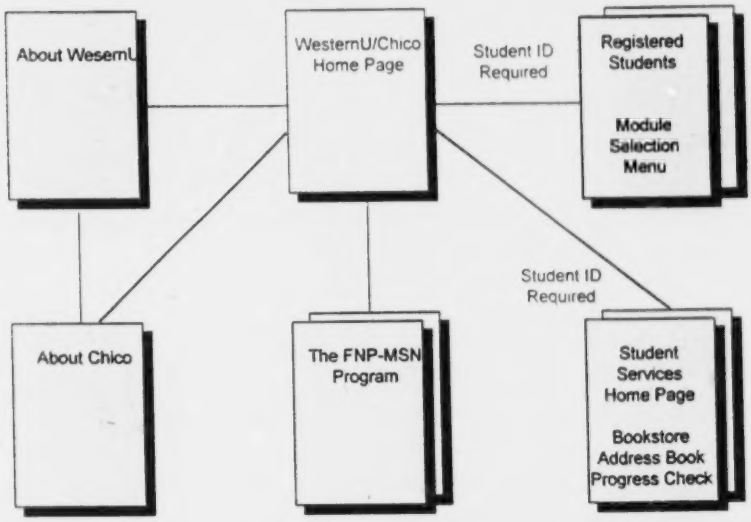
- **Revision of Course Materials.** As acknowledged experts in the content of the courses they facilitate, instructors play a vital role in keeping the course materials accurate and up-to-date. Suggestions for improving course facilitation are also encouraged.

- **Committee Participation.** Instructors are required to participate in faculty meetings, standing committees, and ad hoc committees as needed.

WesternU's Web Interface

WesternU's Web interface provides a means of delivering text, graphics and multimedia in a consistent and user-friendly way. It also provides a convenient and efficient medium for student assessment, interactive presentations, research and information management, and communication. Behind the scenes, the interface provides faculty with a means for collecting and analyzing student assessment data, managing online discussions, and posting announcements, as they're needed.

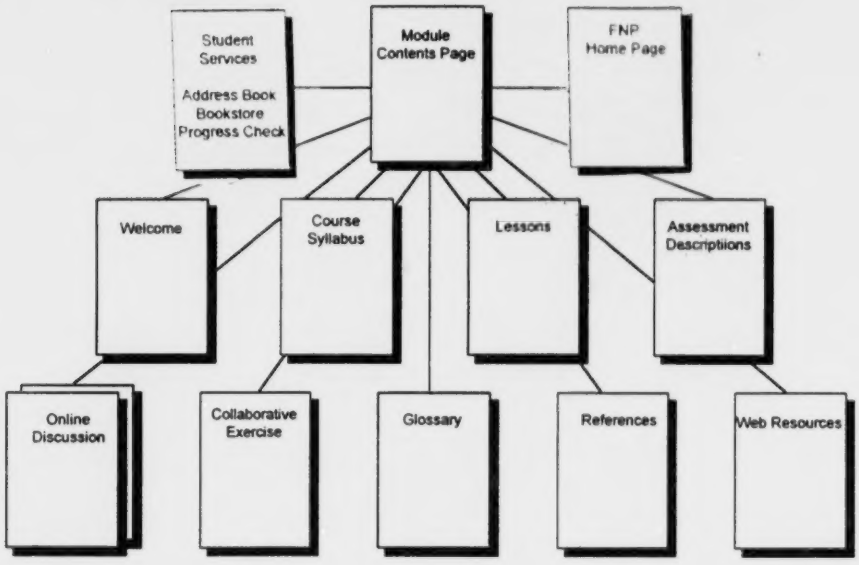
WesternU-Chico's FNP Web site can be found at **http://www.westernufnp.edu**. The following chart illustrates how this publicly accessible Web site is organized.



While anyone can enter the public Web site, courses and modules are password protected. Registered students access the modules in which they are enrolled by selecting "Registered Students" and entering their password. Instructor passwords provide access to all areas of the web site.

Selecting a module from the Module Selection Menu takes the student or instructor to the Contents Page, the "home page" for that module. The Contents Page is essentially a list of all the links to relevant information and resources in the module. The following chart shows the typical features included on a Contents Page:

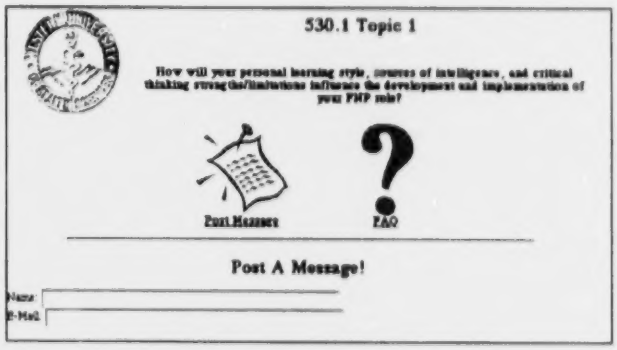
BEST COPY AVAILABLE



Because face-to-face contact in the FNP program is limited, students are expected to interact with faculty and other students using their computers. Most modules incorporate one or more online discussion activities, based on major themes or issues introduced in the module.

Like e-mail, online discussions are asynchronous; that is, they use a delayed messaging approach. Asynchronous online discussion groups offer distance learners a convenient alternative to face-to-face discussions. First, students can read and reply to comments at a time that fits into their schedule, rather than the schedule of the group at large. Second, all comments are archived so that the student or instructor can reference an earlier statement and follow the progression of the discussion over time. Third, students can read a comment, take the time to analyze it, and compose a response offline before replying.

Online discussion activities are assigned in the module topics and selected from the Online Discussion Menu. Once they enter the discussion area, students can review the previous *postings* (messages), post a response to a specific message or post a new message.


530.1 Topic 1
How will your personal learning style, sources of intelligence, and critical thinking strengths/limitations influence the development and implementation of your FNP role?
Post Messages
FAQ
Post A Message!
Name
E-Mail

BEST COPY AVAILABLE

Communication for collaborative projects works much like the online discussions, except that only selected students can interact within each discussion area. A separate discussion area on the Collaborative Project Page is created for each work group, and only the members of that group (and the instructor) can read and post messages in that discussion area.

Institutional Issues

Institutional Transition

Institutions considering Web-based education as an alternative to traditional campus-based programs or even other forms of distance education must ask themselves some important questions. Unfortunately, the absence of available data makes many of these questions difficult to answer with any degree of certainty.

- **Is it just a "fad?"** Web-based education is still a novelty. Will it have staying power once the novelty wears off?

- **Can I keep up with the technology?** Institutions have to decide if they are willing to invest the time and resources in adapting to technology that are constantly evolving. What is state-of-the-art at the planning stage may be yesterday's model by the time the program is implemented.

- **How much access and bandwidth do we want and what is available to the average student?** The answer to this question will depend on the characteristics of the target market, the nature of the curriculum, the resources available (to both students and the institution), and projections for program growth

- **How much computer expertise will students need to complete the program?** The more sophisticated the delivery system, the more time and resources you will need to invest in orienting, training, and handholding users. This includes faculty and staff as well as students.

- **Is it cost effective?** Because web-based education is relatively new, little data exists to support the cost-effectiveness of this delivery mode. Value can be measured in many ways, including market development, image enhancement, and technological leadership.

- **Is student performance comparable?** Although research data is scarce, preliminary studies show that web-based learners learn as well as classroom-based learners. As in other media comparison studies, however, the outcomes are highly

influenced by the nature of the learner population, the design of the program, and the skills and teaching style of the instructor.

If, based on the answers to these questions, there is sufficient interest to proceed, the institution must consider the costs involved in such an undertaking. These include institutional costs such as curriculum development, ongoing maintenance, and infrastructure, as well as the costs to the students.

Perhaps more importantly, the institution must be willing to make paradigmatic shifts in how it conceptualizes its own mission and goals. It must be willing to rethink:

- **Who are the students**-Institutions must face the reality that students are no lnger a homogenous group of individuals that are present on-campus on a full-time basis with education as their single purpose in life. Policies, procedures and attitudes must evolve to permit a greater range of opportunities for adult learners that must balance a multitude of obligations
- **Faculty roles and voice**-While a core of full-time faculty is sill essential for the vitality of a curriculum, there will be a dramatic increase in the number of part-time instructors. Institutions must formulate policies and procedures that afford these part-time faculty members an opportunity for significant input into the curriculum and provide a role for them in institutional governance.
- **Physical plant needs**-The demand for more flexible classroom space will increase. Large traditional classrooms will also have to be able to be configured as multiple small group discussion rooms. Also, computer access and the ability to access the Internet will soon be required for each seat in a classroom.
- **Learning resources**-The library will be transformed from a collection of texts to a learning resource center with extensive access to electronic databases and professionals skilled in both the content of the resources and the technology used to access them.

Most of these issues are not new to the dialogue occurring in most institutions, however, the initiation of a Web-based MSN/FNP program has taken them from the area of academic discourse to the reality of academic planning.

Future Issues

As the FNP program expands its enrollment and other programs are explored for their distance learning potential, there will be many opportunities to leverage the experiences gained from this project. The evolving nature of the World Wide Web makes the development of low-cost technology such as Web-TV boxes a real possibility. Cable modems will increase not only the speed of data transmission, but

will expand the information bandwidth enough to support real video and other interactive multimedia applications.

As distance education over the web gains popularity, standards for virtual learning will be gradually established. In addition, traditional faculty requirements for on-campus hours, teacher-student contact, and tenure and promotion will need to be re-examined in light of the increasing importance of distance education to the institution.

Recognizing the Team

Developing the MSN-FNP program has been and continues to be a collaborative effort among many talented individuals, some of whom we wish to acknowledge here. The program is as much a testament to the possibilities of decentralized workgroup collaboration as it is to the promise of decentralized professional education.

Ted Wendel, PhD, *Chancellor*, WesternU-Chico Campus

Karen Hanford, MSN, FNP, PA-C, *Program Director*, WesternU-Chico Campus

Joan Cobin, RN, PhD, FAAN *Curriculum Coordinator/Education Specialist*, Cambria, CA

Jerry Kellogg, MA, *Instructional Designer*, Creative Edge of Vista, CA

Ken Bedker, *Webmaster*, Computer Concepts of San Clemente, CA

Diana Lithgow, RN, BSN, MSN, FNP-C, *Course Developer and Instructor*, Huntington Beach, CA

Nancy Donaldson, RN, DNSc, *Course Developer and Instructor*, Donaldson & Associates, Newport Beach, CA

Tina Solomon, RN, BSN, MSC, FNP, *Preceptor Coordinator and Instructor*, WesternU-Chico Campus

Karen Van Leuven, RN, PhD, *Instructor,* Piedmont, CA

Janet Wendel, *Assistant to the Chancellor*, WesternU-Chico Campus

Lorraine Craft, *Assistant to the Program Director*, WesternU-Chico Campus

The Chico campus mailing address is WesternU - Chico Campus, 1400 West Third Street, Gordon Hall, Suite 106, Chico, California 95928. The telephone number for the MSN/FNP program is (530) 898-7025.

All academic and administrative facilities of the main campus of the Western University of Health Sciences are located on or adjacent to College Plaza, 309 E. Second Street, Pomona, CA 91766. The main switchboard is (909) 623-6116.

The Essentials of Master's Education in Nursing: Where Are We?

BARBARA TUCKER, PhD, *Professor, MSN Program Coordinator*
JANICE MAVILLE, EdD, *Associate Professor*
University of Texas-Pan American, Edinburg, Texas

THE UNIVERSITY OF TEXAS-PAN AMERICAN is a comprehensive liberal arts university located in Edinburg, near the southernmost tip of Texas. There are approximately 12,500 students enrolled in one of the 48 Bachelor degrees, 34 Master degrees, or 2 Doctoral degree programs. The current UT-Pan American campus is a green, tree-shaded campus less than 40 years old. The majority of buildings have either been built or renovated within the last 20 years.

The Master of Science in Nursing is a program within the Department of Nursing in the College of Health Sciences and Human Services. The program was approved in 1993 and admitted its first students in 1994. The development of this program coincided with the early efforts of the American Association of Colleges of Nursing to articulate the characteristics and components of Master's Education for advanced practice nursing. In fact, I participated in the second of five regional conferences in which AACN invited educators, clinicians, and administrators to help develop standards for graduate advanced practice nursing education. The UTPA program was also fortunate to have Dr. Mary Fenton, Dean of the School of Nursing at the University of Texas Medical Branch Galveston as consultant during the final development stage.

The MSN program had 10 graduates in December 1996 from the first cohort admitted in 1994. Currently, there are approximately 23 part-time students in the Adult Health advanced practice curriculum with role focus on Clinical Nurse Specialist, Educator, or Administrator. Right about now, you are probably sitting there thinking, "So what makes your program any different than ours?"

As you saw from the map, our university is located right on the border with Mexico. You frequently hear people from San Antonio say they are located in South Texas. UT-Pan American is located 250 miles directly south of San Antonio—and we're still in the United States! Currently, over 85% of the population of the county in which UT-Pan American is located are hispanic. The student body is 86% hispanic. The next county to the west is 94% hispanic. The Rio Grande River separates Texas and Mexico, but the separation is more on maps than actual. The flow back and forth across the border is fluid and continuous.

Therefore, a constant awareness of the cultural influence on the community, on health care delivery, and on health care providers is essential.

There is also a very high level of poverty in the area. Average annual income in the Rio Grande Valley is $8053 with approximately 48% of the population below poverty level. This compares with the average income of $19,091 for the total United States with only 14% below poverty level. Poverty and unemployment rates in the area are almost double the statewide average. Many live in unincorporated areas called *colonias*. The dream is to buy a small plot of land and build your own home. Unfortunately, in the past, many of these small lots were sold without electricity and running water. There are numerous outhouses in the more rural areas. Therefore, disease and lack of access to health care are major problems facing our population.

So how is our program unique? The difference is that we were integrating the AACN Essential Elements in a program with predominately hispanic students and hispanic clients from poor rural areas. Our Mission Statement reflects our awareness of the unique atmosphere in which we live.

In fact, 100% of the first graduating class were of hispanic ethnicity. The current students do not reflect the area's minority population exactly. Approximately 65% are hispanic and 12% are Canadian. So the questions of interest are, "How did we adapt the elements for our student population and client population?" and "How well did the graduates and their employers feel we did?"

First, we will review the essential elements and where they are found in our curriculum. Then, we will review the graduate and employer surveys, focusing on the responses that reflect the essential elements. The third part of our presentation will discuss the adaptations, additions, and emphases, which reflect the needs of our students and clients.

I. INCORPORATING ESSENTIAL ELEMENTS INTO AN ADULT HEALTH MASTER OF SCIENCE IN NURSING PROGRAM

A. Graduate core curriculum

Research

Reading and critical analysis of research is integrated into the didactic and clinical portions of each course. Students complete and discuss annotated bibliography cards on research studies appropriate to the current area of study. In addition, there is a separate three-semester credit hour course in research, which has a graduate statistics course as its prerequisite.

There is a thesis option available for students choosing to do original research or a new application of a previous study; however, the majority of students elect to do a Practice Intervention Project as their capstone experience. The Practice Intervention Project entails the identification and delineation of a problem, issue, or project related to the student's clinical or functional area, review of pertinent literature, and development of a proposed

solution with steps in implementation and evaluation methodology. The students submit a written paper and give an oral presentation of the project to a selected audience.

Project titles have included:

Self Efficacy as a Predictor of Glycemic Control in Mexican American Adults with NIDDM

Increasing Cultural Awareness of Foreign Nurses Toward the Mexican American Client: An Educational Intervention

Identification of At-Risk Diabetic Patients Through Semmes-Weinstein Monofilament Foot Screening in the Acute Care Setting

Stress Management in the Hispanic Vocational Nursing Student

Breast Self Examination in Mexican American Women

Policy, Organization, and Financing of Health Care

Health care policy, organization, and financing content is found in the Issues in Nursing course where faculty lead discussions and students make presentations on selected topics such as current legislation and health care policy affecting advanced practice and health care, third party reimbursement, prescriptive authority, quality management, and outcome analysis.

Ethics

Identification and analysis of ethical dilemmas is also found in the Issues in Nursing course. The learning strategy for these issues is use of formal debate. Students have debated topics such as

Should Genetic Testing Be Done on Every Individual?

Do Nurses Have Power?

Are Individuals with Risk-Taking Lifestyles Entitled to the Same Health Care as Non-Risk-Taking Individuals?

Should the HIV Status of a Health care Provider Be Public Information?

Should Professional Nurses Participate in Collective Bargaining?

Professional Role Development

Didactic content delineating the advanced practice roles of teacher, researcher, advocate, clinician, consultant, collaborator, and manager of systems is integrated in each course with actual application primarily in the clinical courses. Students apply knowledge of advanced health assessment, differential diagnosis, clinical management, and evaluation of outcomes in clinical experiences with individual clients, groups of clients, and communities. They collaborate with other members of the health care team to develop original critical pathways for acute care and primary care clinical problems.

In their Advanced Practice role courses, students have additional opportunities to integrate their new functions and abilities into professional practice. They develop a personal portfolio and position description for the area of advanced practice in which they anticipate

seeking employment or continuing employment. They learn to develop budgets, manage resources, and analyze cost-effectiveness of clinical decisions.

Theoretical Foundations of Nursing Practice

In addition to discussion and analysis of theories from nursing and other sciences, students actually critique a nursing theory in relation to their own nursing practice. In an Application to Practice paper, students examine how they can apply the theoretical concepts of a selected nursing theory to advanced practice in their own specialty; critique the applicability of the theory based on specialty practice knowledge, standards of care, and research; and derive an innovative strategy for development or research using this theory applicable to their own specialty practice.

Human Diversity and Social Issues

This area will be addressed at length in the third part of our presentation; however, examples of core curriculum implementation are the numerous clinical experiences focused on developing an awareness and appreciation of human diversity in health and illness. Students are included in faculty projects assessing wellness in the local communities and corporations. In addition, students focus on gerontology during their last clinical course.

B. Advanced practice nursing core curriculum

Advanced health assessment, advanced pathophysiology, and advanced pharmacology are each presented in a separate three semester hour course. The student has many opportunities to apply this content during the clinical experiences found in the Advanced Adult Health specialty courses.

There are three Advanced Adult Health courses, which allow the integration and application of advanced practice nursing knowledge. The focus of the first specialty course is health promotion. Students participate in the annual wellness assessment for the UT-Pan American faculty and staff, including individual counseling and development of health promotion plans. They also plan and implement a community health promotion teaching project.

The second clinical course focuses on health restoration. Students make presentations and do demonstrations of complementary therapies such as imagery, therapeutic touch, herbal and aroma therapies, massage, and acupuncture.

The third specialty clinical course focuses on gerontology. Students review biological and psychosocial theories of aging. Presentations reflect gerontological issues such as elder abuse, impotence, and poly-pharmacy.

The Rio Grande Valley has approximately 120,000 older, retired individuals that spend from three to six months of the winter in our warm climate. Some have been wintering here for 20 or more years. The majority drive down in trailers or recreational vehicles and live in large parks where constant opportunities for fun and activities are organized. The

influx of these older individuals, many with chronic health problems, has a tremendous impact on the health care delivery system. We also provide opportunities for students to interact with vigorous older individuals so that they are able to see how seriously these elders participate in health promotion and health restoration.

II. EVALUATING OUTCOMES REFLECTING ESSENTIAL ELEMENTS IN THE MARKETPLACE

A. Minority graduates

Follow-up surveys were sent to the 10 MSN graduates approximately 6 months following graduation. The following reviews their responses to the outcome criteria which reflect the essential elements present in the curriculum.

Research

The outcome objective for research was to "Participate in, evaluate, and use research to promote the body of nursing knowledge." The graduates reported that 60% were highly satisfied, 30% were satisfied, and 10% were not satisfied with their preparation in the area of research. Now with 10 graduates, the higher math on these percentages is not too difficult. The one student who reported not being satisfied was contacted to follow-up on what she perceived needed to be changed. She was most surprised to learn that she had marked the Not Satisfied response and stated that she was definitely most satisfied with the preparation she received. She stated that she felt very confident in reading, interpreting, and using research studies.

Policy, Organization, and Financing of Health Care

The outcome objective was "Function as a nursing leader in professional association activities, health policy formation, and legislative and regulatory issues." Forty percent were highly satisfied with their preparation in this area. Sixty percent reported being satisfied. The curriculum committee felt that this was a weak area for which a new course is being developed.

Ethics, Human Diversity, and Social Issues

The outcome objective for these areas was to "Demonstrate cultural competence in meeting the dynamic health needs of the international, multicultural, and multilingual society of the Rio Grande Valley." The respondents reported that 90% were highly satisfied with their preparation in this area, with 10% reporting to be satisfied.

Professional Role Development

There are two outcome objectives in this area. "Demonstrate beginning competency in the organizational and work role aspects of advanced practice including education,

consultation, research, and management" had 70% highly satisfied and 30% satisfied with preparation. "Function as a multi-disciplinary collaborator in the assessment, planning, implementation, and evaluation of health care" had an 80% highly satisfied component with 20% reporting satisfaction.

Theoretical Foundations of Nursing Practice

This section also had two outcome objectives. "Synthesize theories from natural, behavioral, and social sciences to support advanced clinical nursing and role development" and "Evaluate the use of nursing theories as a base for advanced practice both had a 60% high satisfaction score and a 40% satisfaction score.

Advanced Practice Nursing

The advanced practice nursing section had one outcome objective with three parts. "Practice at a beginning level in an advanced nursing role by: Demonstrating critical thinking and diagnostic reasoning skills in clinical decision making in the identification, evaluation, and management of health needs of clients" and "Demonstrating development of a healing nurse-client relationship" both had 80% of respondents reporting high satisfaction and 20% reporting satisfaction. The third component, "Reflecting competency in the teaching-counseling aspects of practice" reflected 90% highly satisfied and 10% satisfied.

Overall, we interpreted this data to mean that the graduates felt they had accomplished the essential elements of master's education and were able to use this knowledge in the advanced practice positions in which they were functioning. Numerous positive unsolicited comments were written on the surveys:

"I now read research journals and analyze research critically."

"I have been able to apply research findings to my report writing."

"The MSN program prepared me for scholarly research and teaching."

"I now appreciate the power of collaboration and the importance of research in nursing"

"On comparison with other MSN programs, the UTPA MSN was on the cutting edge with course offerings."

"The MSN program has enabled me to be a skilled professional which is exactly what I want to develop into."

"The program has contributed to my professional and personal growth by opening a new level of practice. I'm excited and eager to contribute to the nursing profession."

B. Employers in Minority Communities

Approximately four years ago, I attended my first AACN Conference. At the time, Barbara and I were a faculty of two involved in the planning of the inauguration of our Master's program, developing the courses, and teaching the courses in what seemed to be

simultaneous occurrences. I remember listening with fascination, awe, and sometimes confusion to the various discussions on graduate education. It was a time of decisions: What would be the graduate core curriculum? What are the elements essential to graduate nursing education? What is the relationship between the Master's prepared nurse and the changing health care delivery system?

Much has happened in four years. We have been very fortunate to have developed our program from the foundations established by the AACN and are pleased to share the outcomes with you today.

As Barbara has indicated, we are located in an area rich with Hispanic culture. At the time of evaluation of program outcomes, our graduates were all employed in minority communities. Employers included community colleges, a university, hospitals, rural clinics, a home health agency, and an employee health insurance agency. The Employer Survey of New MSN Graduates was developed to specifically address outcome objectives reflecting the essential elements of master's education in nursing. Six months following graduation, employers were asked to evaluate, on a scale of 0 to 4 ("Not Known" to "Excellent") how well the UT-Pan American MSN graduates performed in the area of the essential elements.

Research

Employers rated graduates on their ability to "Participate in, evaluate, or communicate research in nursing practice with peers, clients, and other health professionals." Respondents reported that they felt 88% had "Excellent" preparation and 12% had "Good" preparation.

Policy, Organization, and Financing of Health Care

Employers rated graduates on their ability to "Demonstrate beginning competency in the organizational and work role aspects of advanced practice including education, consultation, research, and management." Respondents related that 96% of graduates "Excellent" beginning competencies and 4% had "Good" competency.

Ethics, Human Diversity, and Social Issues

Employers rated graduates on their ability to "Demonstrate an awareness and sensitivity to the cultural, social and health beliefs of clients." Respondents felt that 96% of graduates had "Excellent" awareness and sensitivity and 4% had "Good" awareness and sensitivity.

Professional Role Development

Employers rated graduates on their ability to "Practice at a beginning level in advanced nursing roles in the assessment, diagnosis, identification, evaluation, and management of health needs of clients" and "Function as multi-disciplinary collaborator in the assessment, planning, implementation and evaluation of health care." Respondents rated 92% of graduates as "Excellent" and 8% as "Good."

Theoretical Foundations of Nursing Practice

Employees rated graduates on their ability to "Use critical thinking skills." Respondents felt that 96% of the graduates had "Excellent" critical thinking skills and 4% had "Good" critical thinking skills.

In addition to the essential elements, employers were asked to identify the strengths of the MSN graduates employed. Comments received included:

"Has displayed great organizational skills and assumes leadership roles."

"Awareness of community cultural beliefs as they impact health and nursing."

"Knowledge in theory, skills and organizational skills."

"Strong cultural diversity foundation."

"Knowledge in diseases and cultural sensitivity to Hidalgo County."

"Keeps abreast of the latest and educates our staff."

We reviewed both the employer and graduate surveys not only in relation to the characteristics and components of Master's education for advanced practice nursing, but also to the mission of our department and the university. In doing so, we found that the program was meeting the needs for education, for employment in the marketplace, and for service to the community.

III. MAXIMIZING MINORITY EMPHASIS AND OPPORTUNITIES FOR STUDENTS AND COMMUNITY

A. Course Objectives and Clinical Applications

Living in the Lower Rio Grande Valley of South Texas, we have a unique challenge and obligation to maximize the cultural essence of the region into the curriculum. Therefore, each course that we have developed contains objectives and clinical applications with specific minority emphasis. In developing our curriculum it has been interesting to see how the minority emphasis flows through the essential elements for master's education.

Research

The essential element of research is included in the Research in Nursing and Informatics in Nursing courses. Objectives which reflect the cultural component include:

a. Evaluate research related to culturally diverse populations
b. Examine rights of human subjects in research projects
c. Develop a proposal for research in a selected area of interest
d. Demonstrate the ability to communicate on a global basis

Both the Research and Informatics courses are non-clinical courses. Therefore, clinical application is reflected by students examining minority issues as they "Explore a practice area for research interest" and "Develop a proposal for thesis or practice intervention project." Some of the student research topics have included:

Psychosocial Effects of Antepartum Bed Rest on Mexican-American Pregnant Women

Learning Needs of Mexican American Multipara Mothers After Cesarean Section

Diabetic Impotence and the Mexican American in the Lower Rio Grande Valley

The Effect of Mexican American Males' Health Beliefs on Return to Work Following Injury with Lower Back Pain

Relationship of Internal Locus of Control, Self-Care Behavior and Adherence to Diabetic Treatment Regimen in the Mexican American Diabetic Adult

The Relationship Between Eating, Exercise Behaviors, and Diabetic Category Among Mexican American Adults in an Educational Program

Human Diversity, and Social Issues

Many human diversity and social issues concepts are included in the Professional Issues in Nursing course and the three Advanced Adult Health courses. Objectives which reflect the cultural component include:

a. Critically evaluate the social, economic, cultural, political, and historical influences on advanced practice nursing.

b. Compare and contrast health promotion beliefs of the Mexican American population with those found in the literature for the general population

c. Articulate philosophical, cultural, gender, and ethical considerations associated with health restoration strategies with emphasis on the Mexican American population

d. Demonstrate competence in intervention and treatment of clients from the Mexican American population

There is clinical application through several different assignments. Students complete an Individual Health Promotion Project in which each student identifies a client with a health risk and works with that person to develop a personalized health promotion plan. The student follows the client and completes an oral and written summary of the project. There is also a Group Health Promotion Project where students work as a group to promote the health of an identified group. Identified groups have included the workforce of a local manufacturing company, school district bus drivers, and our own university and staff. This project has included a risk factor analysis and blood chemistry profile. The highlight of this project is the individualized consultation and health promotion planning that occurs using the results of the risk factor analyses and chemistry profiles. Clinical pathways are relatively new to many of our health agencies. With the Clinical Pathway Project students collaborate with the health agencies in designing clinical pathways particular to that agency. As a result of this project several of our students were hired as consultants to continue other pathway development. Examples of pathways that have been developed included Total Abdominal Hysterectomy, Uncomplicated Myocardial Infarction, Tuberculosis, and Atypical Pap Smear

Because of our geographic location, many northern senior citizens like to winter in the area. We have an increase of approximately 120,000 older adults during the winter months. This introduces another unique culture, that of the retired, or gerontologic client. One clinical application for this group includes a survey of retirees and examination of advanced practice for this particular age group and culture. Most of our classes are taught in seminar fashion and all contain presentations related to human diversity and social issues. Our second Advanced Adult Health course contains an emphasis on health restoration. A major portion of this course is dedicated to the study of alternative or complementary therapies. This has been of great enjoyment for the students and for faculty as well, with students responsible for presentations which have include such topics as reflexology, relaxation therapy, music therapy and spiritual therapy among others. Probably the most popular presentation has focused on herbal therapy which is a predominant complementary therapy in the Mexican American culture.

Professional Role Development

Courses which especially emphasize the professional role development concepts are the role courses in Advance Practice, Education, and Administration. Objectives with minority emphasis include:

a. Evaluate the potential impact of advanced practice nursing in medically underserved and health professional shortage areas
b. Apply educational research findings to the teaching of specific populations, especially minority learners

To provide clinical application, specific objectives are identified for the students to demonstrate the incorporation of cultural competence in the practice setting in their role choice of Advance Practice Nurse (Clinical Specialist), Educator, or Administrator.

Theoretical Foundations of Nursing Practice

Theoretical foundations are emphasized in all courses, but the primary emphasis is in the Theoretical Foundations in Nursing course. Objectives which reflect the cultural component include:

a. Explore the applicability of selected theories to diverse populations
b. Articulate a clinical application of a framework for nursing to advanced practice nursing

Although this is a non-clinical course, there is a clinical application as students analyze their own practice in relation to a selected nursing theory.

Advanced Practice Nursing Core Curriculum

Maximizing minority emphasis and opportunities for our students and the community has also been a major objective for us as we developed courses related specifically to the advanced practice courses of health assessment, pathophysiology, and pharmacology.

Advanced Physical/Health Assessment

The objective reflecting the cultural component is

a. Modify the history, physical exam, and screening procedures according to the client's age, developmental level, culture, and psychosocial status

Clinical application requires students to complete six health assessments on young, middle, and older adult clients. This involves an extensive data collection process including a detailed Cultural Assessment Tool.

Advanced Physiology and Pathology

The objective reflecting the cultural component is "Evaluate cultural health risks with emphasis on the Mexican American population." This is a non-clinical course; however, the concepts related to the cultural objective are reinforced in the Health Promotion Project, Case Presentations, in subsequent class discussions, and in clinical practice settings.

Advanced Pharmacology

Objectives reflecting the cultural component include:

a. Analyze the role and nature of herbal/folk therapies in the management of selected alterations in health
b. Evaluate the safety and reported efficacy of non-prescriptive herbal therapies common to the Mexican American population.

These objectives are especially important since the use of herbal therapy is prominent in the Mexican American culture. The slides you see are two herbal "shops" or herberias located approximately one block apart in one small Valley town. Pharmacology for Advanced Practice is a non-clinical course, but the concepts are reinforced in the Health Promotion Project, Case Presentations, subsequent class discussions, and are practiced in the clinical setting.

B. Student/Faculty Interaction

There are some elements necessary in curriculum development that are intangible and unable to be molded into objectives. Effective, positive, and supportive student-faculty interaction is one of these elements. We have found that in our area, rich in Mexican American culture, the development of culturally sensitive and competent

master's graduate is greatly enhanced by the interaction that occurs between the faculty and students and is applicable to any culture. Nurturing this element involves that faculty: (1) value interaction, (2) recognize the diversity among students, (3) be available, and (4) allow time outside of class/clinical for interaction.

C. Faculty Responsibility

As you've listened to this presentation, I'm sure it has crossed your mind that neither of the two presenters are of Mexican American (or any other minority) ethnicity. This is a thought that has occurred to us also as we've discussed the apparent success of the MSN program in meeting its mission and outcome objectives. We've decided that the basis for success is our genuine appreciation for and interest in the Mexican American culture which surrounds us. Our extensive study of the components of the Mexican American culture has given us as much knowledge (and sometimes more) than our students. We believe that our knowledge is a demonstration of our respect for the culture and therefore, by extension, our respect for our minority students' background. This respect is the basis of our relationship with our students. This respect is communicated to our minority and non-minority students, generating in them the desire to meet the dynamic health care needs of our multicultural, multilingual society in the Rio Grande Valley of Texas.

Restructuring Master's Education: A Contemporary and Unique Model

LINDA J. MIERS, RN, DSN, *Assistant Professor*
University of Alabama School of Nursing
University of Alabama at Birmingham

I AM PLEASED to have been asked to share with you today the master's curriculum at the University of Alabama School of Nursing (UASON), University of Alabama at Birmingham (UAB). My pleasure, you must understand, is multifaceted; the most obvious is that I am thrilled to tell you about the changes we have made in our curriculum. The other facets or the other reasons that I am happy to have been invited to San Antonio for this conference this weekend will become evident at the end of the presentation.

I have been asked to talk with you about restructuring master's education and our efforts to develop what has been described as a contemporary and unique model. Although I will be focusing my discussion on the curriculum review and revision associated with the advanced practice nursing component of our master's program of study, I should point out that faculty steering committees were also reviewing and recommending revisions for the bachelor's and the doctoral programs of study concurrently.

In the next few minutes, I will describe our previous structure, the process we used to restructure the curriculum, the revised design or model, and the outcomes of our efforts. Finally I will discuss what's next in our ongoing quality improvement process.

Previous Structure

Prior to 1994, the master's curriculum at the University of Alabama School of Nursing offered three role specialization tracks: Administrator of Nursing, Clinical Specialist of Nursing, and Teacher of Nursing. Within the Clinical Specialist of Nursing track, we had curricula that prepared graduates for roles as clinical nurse specialist (CNS), nurse clinician or nurse practitioner (NP), and nurse midwife (NM). We offered ten specialties in the CNS option. These included Adult Health, in which students could further specialize in trauma nursing; Cardiovascular; Community Health, where students could concentrate in infection

control; Developmental Disabilities; Gerontology; Maternal-Infant; Oncology; Pediatrics, which offered options for those interested in adolescent health, pediatric pulmonary, pediatric oncology, or school health; Psychiatric-Mental Health; and Rehabilitation. In the Nurse Practitioner option we prepared adult health, family, occupational health, women's health, and pediatric primary care nurse practitioners. We also offered a neonatal nurse practitioner program of study. Many of these options and concentrations were the result of federally funded training grants which allowed us to have a clinically diverse faculty cohort.

The curriculum design for the master's program of studies was composed of two main components: a) advanced nursing courses, which accounted for a minimum of 36 semester hour credits, and b) elective courses, which accounted for a minimum of 4 credits. The advanced nursing component consisted of 18 credits in nursing practice specialization, 8 credits in professional role development, and 10 credits in research courses. The common design required a total of 40 credits, however, the range of credits required was 40, for most CNS options in the Clinical Specialist of Nursing track, to 57, for the Administrator of Nursing track. We also offered students in the Administrator of Nursing track the opportunity to pursue a dual major–the MSN/MBA.

Graduates of the prior curriculum were prepared to meet three broad program goals, which were to: a) integrate advanced nursing knowledge and theoretical formulations relevant to advanced nursing practice to facilitate the delivery of client care, b) contribute to improvements in the delivery of health care and influence health policy, and c) influence the future direction of nursing as a profession.

To meet the needs of nurses in west Alabama, we offered an outreach opportunity to qualified applicants from that portion of the state. A contractual agreement was negotiated between our School of Nursing and the Capstone College of Nursing (CCV) at The University of Alabama (UA), Tuscaloosa. We only offered the program of study that prepared clinical specialists in adult health nursing. Students enrolled in this option earned ten credits by completing courses on the UAB campus and 30 credits by completing courses on the UA campus. Initially, students had to be physically in Birmingham to attend those classes, however, in the early 90s some of the UAB courses were offered via interactive television. I'll talk more about this distance learning mechanism later. The 30 credits earned at Tuscaloosa were UAB courses that were taught on the UA campus by selected Capstone College of Nursing faculty who had been granted joint faculty appointments at UAB and who were members of the teaching teams that developed the course overviews and topical outlines on the UAB campus. Selected UAB faculty were also granted joint faculty appointments at the CCN. Students were assigned advisors on both campuses to facilitate communication. Their degrees were granted by UAB.

The curriculum that I have just described was designed in the early 80s and had served us well for approximately ten years. So what prompted us to restructure? In 1992 we had just completed our self-study for NLN Accreditation. As you all know, that process can be a real eye opener, but a faculty is hesitant to make any major changes until after the site visit. We were also facing a rapidly changing health care system in which the opportunities for our

graduates were changing just as rapidly. Hospitals in our area were eliminating the clinical nurse specialist position or modifying it markedly in favor of the case manager or the care coordinator. Political attention was being placed on managed care and on primary care as opposed to acute, tertiary, or specialty care. In addition to these forces, our University and the School of Nursing were facing increasing economic constraints, in part due to decreasing state legislative appropriations and in part due to a decline in federal funding for nurse education.

The Restructuring Process

In the Summer of 1992, a Master's Education Task Force was appointed; members of the task force were charged with reviewing the strengths, weaknesses, opportunities, and threats associated with the master's program of study. For the next year, they reviewed relevant periodical literature, commission reports, position statements, etc.; held faculty forums; and organized focus group meetings with nursing leaders in the community. They were asked to envision the future for graduate nursing education and to forecast the needs of society. They sought the counsel of several visionary nurse educators from other areas of the country. In the Spring and Summer of 1993 the Task Force proposed and the faculty approved a revised curriculum design.

In the revised curriculum plan we would continue to offer three role specialization tracks: administrator, advanced practitioner, and teacher of nursing. Within the advanced practitioner of nursing track, we would offer programs of study for the clinical nurse specialist in psychiatric-mental health nursing, the nurse midwife, and the nurse practitioner. Nurse practitioner students could select acute and continuing care or primary care as their practice area. The CNS option was retained in psych-mental health, primarily because of certification and licensure limitations imposed at that time. In Alabama, certified registered nurse practitioners licensed by the Alabama Board of Nursing must pass a nationally recognized nurse practitioner certification exam. There were no statutes, then, that addressed the role of the clinical specialist. Because no NP certification exams existed for the specialty of psych-mental health, we continued the CNS option to facilitate the needs of that component of students.

Students who planned to provide care to patients with acute and continuing acute or chronic problems could chose to concentrate on the adult or neonatal populations. If they chose the adult acute and continuing care option, they could further specialize in cardiovascular, neuroscience, oncology, or trauma populations. These specialties were maintained because we had faculty with expertise in these areas, and because initially it was difficult for faculty to "give up" the familiar, established, and nationally known aspects of the prior curriculum. Students who wanted to provide care to patients with episodic acute or chronic health problems in the primary care setting could select from adult, family, gerontology, pediatric, or women's health nurse practitioner options.

The revised program goals for graduates of the new master's curriculum are to: a) integrate theoretical concepts and knowledge from nursing and other disciplines relevant to advanced nursing practice, b) assume leadership in managing and providing quality and innovative services to clients, c) anticipate and respond to client-driven expectations and needs related to health care, d) influence health policy to improve health care, and e) influence the future direction of professional nursing.

During the Summer of 1993 through the Summer of 1994 the restructuring process was continued as we refined the School's philosophy statement to be consistent with the faculty's revised philosophy; developed programs of study and individual courses within those programs, and revised the administrator and teacher of nursing programs of study to be congruent with the revised master's core component of the curriculum.

The Restructured Curriculum Model

The new curriculum design for the advanced practitioner of nursing track has four components: a) the master's core courses, which provide 11 credits required of all students in the master of science in nursing degree program; b) the advanced practitioner core courses, which provide 13 credits required of all students in the advanced practitioner track; c) the advanced clinical courses, which are specialty specific, and which provide a minimum of 24 credits; and d) the required support or elective courses, which provide three to six credits varying with specialty options. The overall design for the administrator and teacher of nursing tracks were similar with obvious differences appropriate to those content areas.

The master's core courses include Program Planning and Resource Management I and II (4 credits), Research Design and Inferential Statistics (4 credits), and Research Project Seminar or Thesis Research (3 credits). Content topics in Program Planning and Resource Management I are: health care in transition; communication in an information society; leadership and change; strategic management; performance excellence; business planning process; care management; and health care environments, inclusive of the social, ethical, economic, technologic, and legal/regulatory environments. At the conclusion of the course students should be able to: a) evaluate a health care delivery setting's internal and external environment for client care delivery; b) discuss the use of the strategic management process in the promotion of innovative change in a client care delivery setting; c) relate program planning to the organization's mission, structure, and strategy; d) apply information and health care information management systems to the analysis of financial and market performance; e) discuss the impact of health policy decision on advanced nursing practice and identify strategies for influencing health policy; and f) assess human resource functions and activities within health care delivery environments.

At the conclusion of Program Planning and Resource Management II students should be able to: a) apply health care information and information management systems to the analysis of financial and market performance; b) determine staffing needs within the care

delivery setting; c) establish a budget based upon knowledge of cost and cost behaviors and nursing care requirements of clients; d) analyze the processes and structures required to support the effective acquisition and control of material resources; e) apply knowledge of human, financial, material, and information resources in developing a program designed to improve the quality of client care; f) examine the impact of human factors on the quality of performance of individuals, groups, and organizations; and g) analyze problems in the care delivery process using a continuous quality improvement framework. Class topics include: marketing, improving quality and outcomes, human resource management, material and space management, financial resource management, legal issues in management, team development, and survival skills for day-to-day management.

The School of Health Related Professions at UAB offers a program of study leading to a Master's of Nurse Anesthesia. Students in that program option are also required to take the Research Design and Inferential Statistics course offered in the School of Nursing. At the conclusion of this course, students in both master's programs will have identified principles of scientific integrity in the conduct and reporting of research, evaluated internal consistency among elements of the research process, described models of research utilization, and acquired skills to participate in collaborative research. Class topics are consistent with these objectives and include content such as conceptual and theoretical frameworks, levels of measurement, information management, research designs, sampling and power, hypothesis testing, data analysis, inferential statistics, data presentation, and dissemination models of research utilization.

Even though we offer a thesis plan, most of our students register for the Research Project Seminar. Students are required to earn 3 credits in this course; some register for one credit for three quarters, some register for 2 credits one quarter and 1 credit the next quarter, and some earn all three credits in one quarter. This variation is determined somewhat by needs of the student and somewhat by the philosophy of individual faculty members. Regardless of how they register, they participate in ongoing research with faculty researchers at the School of Nursing or nurse researchers in the community. The objectives of the course are that the student will have described the state of the art of nursing research regarding one problem in area of advanced clinical practice, participated in the conduct of collaborative research, distinguished threats to internal and external validity of the study, and evaluated the outcomes of investigations for practice application. The practical experience in the course is a contracted experience, and products vary depending on the stage of the various research projects in which students and researchers are engaged.

Our approach to this curriculum component was influenced by a variety of concerns. We noted that in the previous curriculum design, in which students developed and completed individual or group research projects, the faculty spent a great deal of time assisting students to achieve the students' research interests to the detriment of the faculty's research productivity. Also, we were aware that most student research involved very small samples and wasn't of much value to the overall knowledge development in the discipline. Too, we were aware that patients at UAB, a Research I University, might be asked by researchers in a

multitude of disciplines to participate in research studies. The nursing faculty were concerned about the ethics of asking these patients and others to participate in studies that didn't appreciably contribute to the greater good. Therefore, we changed our approach so that students could work with us or our nursing colleagues in the community on research that involves greater sample sizes and, we believe, better developed designs and methodologies.

The advanced practitioner core courses include Advanced Physiology and Pathophysiology (4 credits), Pharmacology and Therapeutics (4 credits), Health Promotion (2 credits), and Diagnostic Process (3 credits). These courses are required of all advanced practitioner of nursing students, and teacher of nursing students were required to take the Advanced Physiology and Pathophysiology and the Diagnostic Process courses. Course objectives and content in the physiology and pathophysiology and pharmacology and therapeutics courses are, I believe, self-evident. We build on the knowledge students bring from their undergraduate education and address the topics consistent with and necessary for advanced nursing practice.

The Health Promotion Course was designed to prepare students to use population data to assess the health status of a selected community; assess individuals for characteristics of unhealthy or high risk health behaviors; apply interventions to alter selected individual health behaviors; identify theoretical/conceptual approaches useful for family risk assessment and intervention; analyze selected social, environmental, cultural, and economic factors that impact on the health of families; and apply a decision-making model to health care situations with ethical implications. Topics include using theory to influence health behavior; health promotion and the family; development and delivery of health promotion/disease prevention services; risk assessment; tobacco/substance abuse; stress management; ethical, racial, and cultural issues and their implications for health promotion and disease prevention; health promotion in the community; characteristics of successful wellness programs; injury prevention; counseling and recommendations for exercise, nutrition, and weight management; and ethical issues in health promotion and disease prevention.

Our Diagnostic Process course was designed to prepare students to obtain a health history that includes physical, psychological, developmental, sociocultural, and spiritual aspects of the client as a holistic, adaptive being; to assess systematically, accurately, and completely the physical, psychological, developmental, sociocultural, and spiritual adaptation of adults and/or children; to integrate data from the health history, physical examination, and diagnostic studies to identify the client's health status and deviations from normal findings; to apply the processes of critical inquiry and diagnostic reasoning to make differential diagnoses for common presenting problems of clients; and to record in SOAP format, data from the history and physical examination. The course is composed of didactic classroom content and laboratory experiences in the nursing skills lab.

The sequence of advanced practitioner clinical courses is offered over three to five quarters; most sequences begin in the Fall Quarter each year. Each option and specialties within the options of the Advanced Practitioner of Nursing track developed courses appropriate to the clinical needs of their individual student populations. Generally there are

three theoretical and clinical practice courses followed by an intensive residency course. As we developed the "clinical" courses in the Advanced Practitioner track, we were very conscious of the need to consolidate resources where possible. We spent many meetings looking for ways to combine overlapping content into "universal" courses or to develop modules of content that students could move in and out of as required by their specialty. We were mindful of the appropriate sequencing of content, so in some instances it was possible to combine groups of students in a single course and in other instances it was not. Ultimately we adopted the "universal" course approach.

For example, students enrolled in the Adult, Family, and Gerontology Primary Care options and students enrolled in the Adult Acute and Continuing Care option take the same first two clinical courses, NAH 620 and 621–Episodic and Chronic Health Problems of Adults I and II. Although the course objectives are the same for all, clinical experiences vary a bit to meet the needs of the individual student groups and clinical conferences are directed to the patient population of interest. As an example, on the day students learned about management of diabetes mellitus in the primary care setting, in their clinical conference the adult acute care students were presented with a case study of a patient who had been admitted to the hospital in metabolic acidosis. They were asked to determine the differential diagnoses and the most likely diagnosis for that patient. We discussed the specific management of the patient's problems including which IV solution to infuse, how fast to infuse the solution, and how to correct the hypokalemia and the hyperglycemia. We discussed the physiologic basis of the problems and how that might influence the therapeutic measures. In the Spring Quarter and Summer Quarters the students in these options separate and register for courses specific to their specific practice areas. For example those in Adult Primary Care register for NAH 622 - Primary Health Care of Adults and NAH 692–Residency in Primary Care of Adults. Students in the Adult Acute and Continuing Care option register for NCA 622–Management of Complex Responses in Critically Ill Adults and NCA 692–Residency in Acute Care and Continuing Care.

A similar configuration of courses was developed for the students in the Women's Health Nurse Practitioner option and in the Nurse Midwifery option. Students in these options would together take NWH 620–Management of Women's Health Care and NWH 621–Management of Normal Antepartal Care. Then they would separate for the remainder of the clinical courses. Women's Health students would register for NWH 622–Advanced Women's Health Nursing and NWH 692 - Residency in Women's Health Nursing. Nurse Midwifery students would register for NMW 622–Normal Intra- and Postpartal Care of Women and Neonates, NMW 623– Pregnant Women with Problems and Abnormal Newborns, and NMW 692–Residency in Full Scope Nurse Midwifery Practice. Faculty were always mindful of the content requirements of the various certifying bodies and incorporated those requirements into the appropriate courses. For some students that meant they would need additional credit hours to accommodate the clinical practice requirements. Most students would obtain about 560 contact hours in their clinical area, some have just over 600 hours, which is consistent with the expectations of the certifying agencies.

Finally all students have a requirement for required support or elective courses. For example, all students in the Adult Acute and Continuing Care option are required to have six credits in this curriculum component. All are now required to take Electrocardiography for Advanced Nursing Practice, which is a 3 credit course. This is a refinement that was made in 1996. Students can then select from a variety of elective courses for the remaining three credits; for example, students interested in focusing on the cardiovascular patient population may take Advanced Cardiovascular Nursing, those interested in trauma may take Advanced Trauma Nursing, etc. There is the caveat that these elective support courses are only offered if six or more students register for the course. This was an administrative decision made in 1995 and implemented for those admitted in 1996 to minimize the number of low enrollment courses. Elective courses are scheduled once per year and if necessary, advisors work with small groups of students to schedule them in the same course in the same year. This may mean that in reality a course is offered only every other year.

The curriculum was designed so that students could complete their program of study in six quarters if they began their studies in Spring Quarter, or eight quarters if they began their studies in Fall Quarter. Initially we admitted students every quarter, but soon it became apparent that we needed to limit admissions to the Fall and Spring Quarters. In reality most students complete the degree requirements in eight or ten quarters, as the great majority work full or part-time while they are enrolled in graduate study.

Development of an Infrastructure

In the restructuring process, we also had to develop an infrastructure to accommodate the revised curriculum. Faculty retooled to increase our number of certified nurse practitioner faculty. When we proposed the new curriculum, we had 5 NPs on faculty. Twelve faculty members have since become NPs by completing our post-master's nurse practitioner option that was designed and implemented in the Fall of 1993. I'll speak more about this curriculum option a bit later. We also hired NPs and a certified nurse midwife as teaching staff.

Faculty had to learn to work together in new ways; nurse practitioner faculty and non-nurse practitioner faculty had to learn to value each other for the expertise each brought to the discussion table. "Families" of faculty members became dysfunctional and in some instances there were "divorces" and "remarriages"; for a while everyone felt like the unwanted or unappreciated stepchild. We had to find ways to create new, cohesive teams of faculty members. To some extent we are still working on this.

Currently enrolled students and applicants were advised of the curriculum revision. Students enrolled in the former clinical specialist of nursing track were given the opportunity to switch their program of study to the new curriculum plan or to complete their current program of study. The faculty made decisions about which courses from the previous curriculum plan could be used in place of new courses for those who elected to switch, which was the majority of students who had not yet begun the sequence of clinical courses.

Admission criteria and procedures were revised to be consistent with the new curriculum model. The first admission pool was so large that we could not accommodate all of the applicants. Therefore, we had to develop alternate lists, and we denied admission to a number of qualified applicants. We had to monitor the progress of students in a way that was different than previously. At the time of admission, students were assigned space in the clinical courses, which had enrollment limits imposed due to preceptor availability. Therefore, students needed to stay on track with their program of study plan or make arrangements to be assigned to another "clinical year." Student advisement took on a whole new look in the revised curriculum model. The Student Affairs Office also had to adjust its procedures and policies to accommodate the restructured curriculum.

Although many faculty were concerned about the short planning time, we decided to begin offering the revised master's core courses in the spring of 1994, the advanced practitioner core courses in the summer of 1994, and the clinical courses in the fall of 1994. For a number of reasons this was the right decision, but it did mean that we were sometimes only a quarter in advance of where we needed to be in course development and approval. This often meant that it was difficult to advise students about their program of study, and that caused some negative press at times. There is probably a limit to the number of times one can say "trust me" or "I'm not sure yet", and we were undoubtedly approaching that limit with that first group of students.

Prior to the beginning of the clinical courses we needed to identify appropriate preceptors for the students, and we needed to find a way to maintain records about the preceptors and the students they precepted. Contracts needed to be established and maintained between UAB and a variety of different clinical agencies. This activity is complicated by the frequent buying and selling of clinical agencies. A computerized preceptor database was conceptualized and after resolving a number of problems, it should be fully implemented in the next several weeks.

Support courses were developed and offered in the four quarters of the 1994-95 academic year. The last class completing the previous curriculum design was scheduled to finish their program of study in August, 1994 and the first class to complete the revised curriculum design was scheduled to graduate in August 1995. To add a bit of a wrinkle into an already chaotic time, we redesigned and renegotiated the outreach option.

Master's Education via Distance Learning

As I indicated earlier, we previously had a relationship with The University of Alabama's Capstone College of Nursing in Tuscaloosa. During our restructuring process Auburn University School of Nursing (AUSON) expressed an interest in a similar relationship. As you can see on the map, Tuscaloosa is approximately 75 miles southwest of Birmingham and Auburn is about 144 miles southeast of Birmingham. The Associate Dean for Graduate Studies worked with the Dean of AUSON and the Associate Dean at the CCN

to develop a program of study that could be completed without the student coming to Birmingham.

Formal contracts were developed between UAB and the two collaborating universities that spell out the details of the outreach arrangements. These contracts were signed by the President of UAB and the Presidents of the respective collaborating universities. The curriculum plan was submitted to the Alabama Commission of Higher Education (ACHE) for approval. Initially we planned to offer the adult and primary care nurse practitioner options and we limited enrollment at each distant site to a maximum of 12 students. However, when the majority of students enrolled in the family option, the economic impact of offering the adult primary care courses to one or two students became a factor. Therefore, now we offer only the family nurse practitioner option at the outreach sites. In keeping with the ACHE guidelines, the majority of credits are earned at UAB and the courses associated with these credits are offered via the Intercampus Interactive Telecommunication System or IITS. The remainder of the credits are earned at the respective distant site. The courses associated with those credits are UAB courses offered and taught on the collaborating campuses by selected nursing faculty with joint appointments at the UASON. Once again selected UASON faculty have reciprocal appointments at CCN and AUSON. The program of study for students at distant sites can be completed in a two-year or eight quarter program of study. Academic advisement is offered by the outreach coordinator and faculty at the distant sites. The first class of outreach students began their studies in the fall of 1994 and graduated in August, 1996. As it was in the previous model, their degree is from the University of Alabama at Birmingham.

Courses taught on the UAB campus and offered to the distant sites via IITS are NUR 601–Program Planning and Resource Management I, NUR 602–Program Planning and Resource Management II, NUR 603–Health Promotion, NUR 612–Advanced Physiology and Pathophysiology, NUR 613–Pharmacology and Therapeutics, NAH 620–Episodic and Chronic Health Problems of Adults I, NAH 621–Episodic and Chronic Health Problems of Adults II, and NUR 630–Principles of Epidemiology. The credit total for these courses is 27. Courses worth a total of 24 credits are offered by the distant sites; they are: NUR 600–Research Design and Inferential Statistics, NUR 604–Diagnostic Process, NUR 698/699–Research Project Seminar/Thesis Research, NFH 622–Primary Health Care of Women and Children, and NFH 692–Residency in Family Health Nursing. Because many students commute to one of the three campuses, efforts have been made to offer courses on one or two days only. This also allows the students in the clinical courses to more effectively schedule clinical time with their preceptors.

To achieve the goals of our outreach option we use a variety of technologies. As indicated previously, class content is offered via IITS and more recently via the Internet. Faculty in some courses have developed home pages for their course, and students registered for the courses can access those sites to get course materials and other information. Students and faculty use fax, e-mail, telephones, and the postal service to communicate with each other. UAB faculty go to the distant sites to meet directly with students at least once per

quarter when their course is offered. For the first two clinical courses, faculty from UAB travel on a regular basis to the distant site to meet with students and to monitor their progress. They communicate with the clinical preceptors by telephone. In the final two clinical courses, nurse practitioner faculty at the distant sites are responsible for the clinical progress of the students. The faculty at all three sites remain in close contact, and faculty from the distant sites participate in team meetings where courses are discussed and refined.

As with any new technology or intervention there have been some problems. Our scheduling of courses has necessitated some heavy duty negotiation with the coordinator of the IITS, which is a statewide system managed at the University of Alabama, Tuscaloosa. The system is available to approximately 15 colleges and universities in the state and there is growing competition for airwave time. Faculty have had to adjust their course planning processes to assure that all course materials are available for students at the distant sites a minimum of one week and preferably two weeks prior to the scheduled class. This timing also means that tests have to be developed well in advance so they can be sent or delivered to the site coordinator prior to the test date. Textbooks need to be ordered by bookstores at all sites. Reference materials, printed, audio, or video, must be available at all sites. And of course sometimes the weather plays a role in the transmission and reception of the telecommunications. We continue to work on problems that faculty or students identify.

Outcomes

To assess how this curriculum revision measures up, we have developed a fairly intricate evaluation plan, which addresses the perceptions of faculty, students, alumni, and employers of our graduates. Evaluation tools for students and graduates were designed to elicit the same information at various points in time to see if perceptions change as the student gains more knowledge, maturity, or experience. Students are given the opportunity to evaluate courses and teaching effectiveness each quarter and their programs of study quarterly and at the time of their exit from the program. Similar questions are asked in each evaluation so that we can track perceptions. In addition, we have quarterly "rap sessions" between the Chair of Master's Studies and students at all sites. In Fall, Winter, and Summer these sessions are held via IITS. In the Spring, the Chair travels to each distant site to meet directly with the students.

As must be evident by now, our restructuring process began and was implemented prior to the publication of the Essentials of Master's Education for Advance Practice Nursing (American Association of Colleges of Nursing, 1996). A draft copy was available to us in late 1995, and in a faculty retreat in December of that year we compared our curriculum design and course and program objectives to that document and to the Curriculum Guidelines and Program Standards for Nurse Practitioner Education (National Organization of Nurse Practitioner Faculties, 1995). We also had the summaries of the summer quarter program of study evaluations and exit evaluations from the first class of students who graduated from the

revised curriculum plan. Overall, we thought there was a great deal of congruence between our curriculum and the national standards. Some refinements were made in some courses, but we didn't want to make major refinements or revisions until we had data from students who were to complete the outreach program of study and from graduates and employers of those graduates one year after graduation.

Faculty take the evaluative input from students and former students very seriously, and we try to incorporate their suggestions when possible or appropriate. Comments and ratings on the exit evaluations from the class of '97 indicate that the goals of the program are generally met. They would like less time spent in master's core courses and more time spent in advanced nursing practice core courses. They would like more contact hours in direct clinical practice. As you can see, these points are comparable to those made by 1995 and 1996 graduates on the alumni survey for which there was a 28% return rate. Alumni, too, believed the goals of the program were met. They suggested refinements in the master's core courses to make them more relevant to their practice, and they suggested more emphasis on the advanced nursing practice core courses. They indicated more clinical practice experience would have been beneficial. Specific comments from alumni include: "more emphasis on nursing politics," "greater concentration on pathophysiology and pharmacology," "encourage NP students to create 'cost effective' protocols for managing patients' health care needs," "less theoretical concepts–nursing theories; most focus on clinical experiences," and " I think another quarter of intense clinical would be helpful".

Employers of the '95 and '96 classes were also surveyed, and we had a 17% response rate. Sixty-eight percent of the employers are physicians, 20% are nurses, and 12% are administrators. To the question "Regarding the position in which this nurse is employed, which of the ratings below best describes the extent to which she (he) fulfills the position description?", 52% marked *excellent* and 48% marked *above average*. To the question "how well does this nurse meet your current and future needs for this type of employee, 88% responded *very well* and 12% responded *well*. All indicated they would hire other master's prepared graduates of the School of Nursing in the same or similar positions. Employers were asked to rate the extent to which the goals of the master's program were met by the graduate; the scale was one to four with one meaning not at all and four meaning considerable. Employers offered ratings that averaged between 3.000 (moderately) to 3.680; the alumni range was 3.167 to 3.342 using the same scale. Specific comments from employers included: ". . . many NPs now practice in a subspecialty area and course work in these areas is helpful," "promote greater confidence in critical thinking, problem resolution, clinical decision support. . . ," "I am extremely pleased with her performance", and "I have noticed that most nurse practitioners are slow relative to other providers. . . program should emphasize speed, accuracy, and thoroughness. . . to be cost effective, they must be able to be efficient with their time. . . ."

The role of the faculty now is to consider these data along with what we know and believe about graduate education in nursing and about the role of advanced practice nurses to refine the program. We must weigh the value of more clinical experience with the impact of a

lengthened program of study and the cost associated with more credit hours. We need to weigh the value of the master's core content with the desire for and value of more time and content in the advanced practitioner core courses. And we must balance the need for efficient use of time with the values of the nurse practitioner with respect to patient teaching and counseling, health promotion/disease prevention, and meeting the social, cultural, and developmental needs of patients along with the physical needs associated with an illness or health problem. Some would say that the time spent with patients by NPs is a good thing!

Another way to measure or evaluate our curriculum is to monitor how graduates fare on national certification exams. For 1996 graduates who took the American Nurses Credentialing Center exams, 100% of the adult, 94% of the family, and 90% of the acute care nurse practitioner graduates were successful in writing the exam. Eighty-three percent of those who took the adult NP exam, and 100% who took the family NP exam offered by the American Academy of Nurse Practitioners were successful. The adult exam scores need to be broken down by practice area. All adult primary care NP graduates were successful, but only 79% of the adult acute care NP graduates were successful in writing the exam. I must share with you that we don't advocate acute care students taking the primary care exam. Initially there was no acute care certification exam, so students petitioned to take the adult primary exams. Now that there is an acute care exam, students sometimes apply for both acute and primary care exams to hedge their bets. We do offer a certain amount of primary care content and clinical experience to our acute care students, so some do choose to petition the Academy to write that exam. It is rewarding to know, however, that the acute care students have a greater degree of success on the acute care exam as opposed to the primary care exam, given that that is the focus of their program of study. All graduates who took exams offered by the College of Nurse Midwives, the National Certification Corporation, and the National Association of Pediatric Nurse Associates and Practitioners were successful in writing their exams.

What's Next?

Where are we now and what is our current curriculum model. Due to a decrease in state appropriations to the School we had to eliminate some program options with low enrollments. Therefore, the Administrator and Teacher of Nursing options were discontinued in the summer of 1995. Students who were in those programs of study were given a limited amount of time to complete their studies; for some that was through the summer of 1997. As an outgrowth of discussions at the December 1995 retreat we developed and obtained approval to offer a new option in Outcomes Measurement and Health Care Improvement. The first class of students began course work this past Fall Quarter. We think this will become an attractive option to students who do not want to be nurse practitioners but who want a graduate degree in nursing. In our Advanced Practitioner of Nursing option, we still offer concentrations for acute and primary care nurse practitioner students. However,

because of the budget cuts mentioned earlier, we discontinued the Psych-Mental Health Clinical Nurse Specialist and the Nurse Midwifery options due to low enrollments, and in the case of the nurse midwifery program of study, the lack of adequate clinical sites and preceptors. As you can imagine, these were difficult decisions that created some polarization of feelings among faculty.

I want to take a few minutes to describe our post-master's nurse practitioner option. This program plan was developed initially at the request of the Vice President for Health Affairs at UAB, who made economic resources available for this option. Only primary care practitioner options in adult, family, and pediatrics are offered. The program of study is 20-22 credits and students come to campus one day each week of the quarter for three quarters. Applicants must have a master's degree in nursing with a focus in clinical specialization and must have had a graduate level pathophysiology course. Currently the programs of studies for the master's and post-master's students are separate, however, there is some discussion about trying to overlap classes or content to better utilize resources. This program option has been very attractive to qualified applicants in Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, and Tennessee. We originally thought we would offer this option for one or two years and then discontinue it as interest waned. However, there has been no waning of interest so we will continue to offer the program option as long as needed or able.

What's next for the master's program at the University of Alabama School of Nursing? We are completing the development of our Vision 2005 document, and we have appointed a task force to review and recommend refinements or revisions in the curriculum design. Another task force has been appointed to review the Criteria for Evaluation of Nurse Practitioner Programs (National Task Force on quality Nurse Practitioner Education, 1997) and to make recommendations resulting from their review and their knowledge of our program. When I return on Monday, I will be attending the graduate faculty retreat that has been scheduled to look at faculty work load and new program of study options in the master's program. To meet the needs of an ever and rapidly changing health care system, curriculum designs must be dynamic and responsive to community and societal needs. We hope we can continue to forecast those needs and prepare master's graduates to fulfill them.

Thank you for allowing me to share our experiences and our curriculum model with you. I am happy to address any questions you might have, but before I do, I promised that you would understand the many facets of the pleasure I have in being in San Antonio this weekend. Thank you, again, particularly for your indulgence. I am now happy to address any questions about the contemporary and unique model for master's education at the University of Alabama School of Nursing.

References

American Association of Colleges of Nursing. (1996). *The essentials of master's education for advanced practice nursing.* Washington, DC: Author.

National Organization of Nurse Practitioner Faculties. (1995). *Advanced nursing practice: Curriculum guidelines and program standards for nurse practitioner education.* Washington, DC: Author.

National Task Force on Quality Nurse Practitioner Education. (1997). *Criteria for evaluation of nurse practitioner programs.* Washington, DC: National Organization of Nurse Practitioner Faculties.

A Model for Design of a Master's Program with an FNP Track

DIANE YOUNG, MSN, RN, Assistant Professor, Chairperson, Graduate Program
Allen College, Waterloo, Iowa

WE AT ALLEN COLLEGE are in the planning phase of a new master's program with an FNP track designed based on AACN's *Essentials of Master's Education for Advanced Practice Nursing*. Because we were discovered to be one of the first to use the model from the grass roots phase of program development, I have been invited to speak today regarding how we used the model to design our curriculum. When my dean approached me about speaking for 30 minutes about this, my response was "it won't take 30 minutes to say 'the Essentials model *is* our curriculum'"—and then I found out I had an hour! While we did pretty much literally adopt the model for our curriculum, we used a process that I plan to overview today–somewhere between 30 and 60 minutes.

I would like to begin by providing a little background regarding Allen College as rationale for why the Essentials lived up to the name as we were designing the program. Allen College was established in 1989 as a subsidiary of Allen Health Systems when our 3-year diploma program closed. We enrolled the first class in the fall of 1990, graduated that class in 1994, and sought and received official accreditation by North Central Association, NLN, and the state board of nursing in the 1994-95 academic year. We have a continuous enrollment of about 250 generic and RN students and have graduated 149 students in the 8 years of operation. We have also been continuously involved in a major building campaign, resulting in the one building which currently makes up our campus-Gerard Hall. So, by all accounts, the college has achieved a great deal in a short period of time.

Although a master's program was in the original college plan, we intended to 'let the dust settle' a bit before undertaking another major project. While we had begun initial discussions about the possibility, there were several forces driving us to establish the program sooner than we may have wished:

1) PEW Projection–a 2-fold increase in NPs by the year 2000 is needed in order to meet the health care needs across the country.

2) Provider Need–a survey of providers in our geographic area identified that 40% had tried unsuccessfully to recruit advanced practice nurses.

3) Consumer Need–the midwest and especially Iowa has lagged behind the rest of the country in managed care. While some may consider this a blessing, it has resulted in a deficit of primary care providers for vulnerable groups such as our large segment of rural elderly.

4) Statewide Response–despite the increasing need for primary care providers in Iowa and the Midwest, the growth in master's and advanced practice programs has lagged behind the rest of the country over the past 10 years, according the latest NLN data. While master's programs have increased by 62% nationally, they have increased by only 44% in the Midwest and only 35% in Iowa.

The final force compelling us forward was the possibility for financial backing through a grant from the Department of Health and Human Services for advanced practice program development which came to our attention in the fall of 1996. So, ready or not, the time was NOW for establishment of the program.

We were looking at an extremely narrow time frame of about two months to develop the philosophy and curriculum and submit a grant proposal. About the time we decided to move forward and submit the grant, we received in the mail the AACN Essentials document. Not only was this a well-founded model for curriculum design which would facilitate our seemingly unrealistic goal, but it also came from an organization that may be accrediting our program in the near future. I can confidently say that without the Essentials document we could not have submitted the grant nor made the progress we have made to date in planning for the graduate program.

The Essentials Model

Graduate Core Curriculum

Research
Theoretical Foundations for Nursing Practice
Policy, Organization, and Financing of Health Care
Professional Role Development
Ethics
Human Diversity and Social Issues
Health Promotion and Disease Prevention

Advanced Practice Nursing Core Curriculum

Advanced Health/Physical Assessment
Advanced Physiology and Pathophysiology
Advanced Pharmacology

Specialty Curriculum

Capstone Experience

The stated purpose of the *graduate core curriculum* is to define the content that forms the foundation for all graduate nursing education. Thus, according to the model, these courses should be completed by all MSN students. While the original intent of the Essentials document was to provide a model for advanced practice nursing, the authors decided early in the process that all master's graduates must have a core of knowledge as graduates of master's education. Therefore, the document states that the graduate nursing core should be incorporated into master's education for students in nursing administration and community health as well as advanced practice specialties. The nursing education track is not cited as a specialty in this discussion of the master's core because, according to the Essentials model, the appropriate preparation for the educator role is the doctoral level rather than the master's level--I am interested in hearing opinions from this group regarding this, as I know new master's in nursing programs continue to develop with an education focus.

The *advanced practice core curriculum* is to be completed by all advanced practice students regardless of specialty–NP, CNS, CRNA, CNM. The model does state that, if graduates in the nursing administration and community specialties are being prepared for a direct patient care role, this core should be included in the curriculum for these specialties. The *specialty curriculum* should be designed based on specialty nursing organization guidelines.

Each of the content areas in the graduate core and advanced practice core includes: 1) a narrative related to the purpose/goal of content, why it is important, and overall content to be included ; and 2) core competencies that each graduate is expected to demonstrate in practice; in many cases we felt that the cited competencies could not necessarily be achieved from the related course alone, but would require knowledge from several courses. Therefore, we determined that these competencies reflect program outcomes and would serve to guide our statement of program objectives. While the intent of the Essentials work was to standardize education and titling, using the core competencies as a basis for program outcomes would also serve to standardize graduate competencies and outcomes evaluation across programs

The ultimate goal of master's education for advanced practice is to provide a practitioner with critical thinking and decision-making skills in order to assess, plan, intervene, and evaluate the health and illness experiences of clients and, ultimately, to improve delivery of health care and outcomes of care. Other essentials skills include the analysis, synthesis, and utilization of knowledge, as well as communication. To this end, the Essentials model incorporates a *capstone*, or culminating experience, which might be a research project, one course, a series of seminars, comprehensive exam, or a thesis for those planning to pursue doctoral studies. With the recognition that some colleges are considering eliminating long-standing requirements for a project or thesis for graduation, I am interested in hearing from this group regarding the Essentials recommendation.

Assumptions

There are several assumptions either stated or implied in the Essentials document and supporting literature that we found necessary to repeatedly refer back to as we developed our curriculum:

> 'The model provides a curriculum framework for design and evaluation of advanced practice nursing education programs for the purpose of standardizing education and titling'

> 'Advanced practice nursing implies a clinical focus in direct care of clients.'

One of my doctoral professors was passionate about accurate and consistent use of language, under the premise that we must speak the same language if we want to communicate effectively with one another, and even more importantly if we want to be heard and understood by consumers and policy makers. A great deal of confusion exists regarding titling in advanced practice. This confusion is well-founded based on the multitude of titles used even by professional organizations. For example, ANA uses the terms 'advanced practice registered nurse' to refer to a nurse functioning in any one of the four advanced practice specialties. The Iowa Code uses the term 'advanced registered nurse practitioner' to refer to a registered nurse functioning in any of these specialties, even though 'nurse practitioner' typically refers to only one of these four specialties. While we in the profession might be able to 'make the leap' between these titles, those outside the profession can't do so as readily, and this ultimately hurts the profession. I am a strong believer in standardized language especially in relation to titling.

We found similar confusion among our own faculty regarding titling. The need to clarify the term 'advanced practice' as referring only to the four specialty roles (nurse practitioner, clinical nurse specialist, certified nurse midwife, certified registered nurse anesthetist) rather than nurse educator, administrator, etc., was critical to implementing the Essentials model.

> 'The graduate nursing core courses are designed for functional roles other than advanced practice nursing, such as nursing administration and community health.'

This assumption is easily applied in the design of courses such as research and ethics but may pose more difficulty in design of a 'roles' course to meet the needs of all four advanced practice specialties or those of nursing administration, community health, or others. We found it necessary to use caution in wording of course descriptions, objectives, etc. so that the core courses applied to roles other than advanced practice.

> 'While the role of the nurse practitioner has traditionally been focused in primary care and that of clinical nurse specialist in acute care, the roles are evolving with the integrating health care system.'

This will be one of our greatest challenges. While our greatest need is for primary care providers, we know that we must prepare our family nurse practitioners for the entire continuum of care. Additionally, while there are recent discussions and isolated efforts to combine the roles of nurse practitioner and clinical specialist in the form of an acute care nurse practitioner, we will focus the FNP program in primary care to meet our identified geographic need.

'The framework is customized to reflect the unique mission and needs of the school, geographic area, and student population.'

Based on this assumption and the need for consistency in advanced practice education, we held a few discussions regarding how much 'customizing' we would or would not do, with some faculty believing that the curriculum model could be adopted with minimal alterations and others believing that we must design a unique structure while integrating the Essentials model. As I will identify briefly, we did adopt much of the overall curriculum model and now feel very confident that our curriculum structure complies with the Essentials and other pertinent standards as well as the needs and characteristics of our college, geographic area, and students and feel very confident in the curriculum

Faculty Preparation

Literature Review

While the Essentials model does stand alone as a guide for curriculum development, our faculty felt a knowledge deficit related to the background and current philosophical underpinnings of the model, as well as the evolution of advanced practice nursing. Additionally, while some of our faculty have certification and have previously functioned in advanced practice roles, they felt a need for update regarding current developments. Thus, in the traditional faculty spirit, we conducted an extensive literature review. In general, we found much discussion centering on the assumptions identified above, which helped to clarify the basis of these and how they might be implemented in curriculum design. We were also impressed with the dynamic nature of the advanced practice role, wishing we could wait until the role 'settles' some, but knowing the evolution will continue like all else in health care.

Professional Standards

Although the Essentials model incorporates guidelines from all appropriate professional organizations, we found it helpful to review these in order to further clarify the role expectations of graduates of advanced practice programs and educational needs. The organizations that guide *graduate education* and respective publications we found helpful include:

–National League for Nursing Accrediting Commission (NLNAC)

"Criteria and Guidelines for the Evaluation of Baccalaureate and Higher Degree Programs"
–Council of Graduate Schools (CGS)

"Master's Education: A Guide for Faculty and Administrators, A Policy Statement"
–North Central Association of Colleges and Schools (NCA)

"Accreditation of Higher Education Institutions: An Overview"

In general, the mandate for graduate programs based on these guidelines is that graduate courses must build on the knowledge and competencies of undergraduate education, and support a higher level of cognitive function and learning outcomes than undergraduate course work.

Based on this mandate, we looked at our undergraduate course descriptions and objectives as we developed these for corresponding master's courses (i.e., research). In doing so, we found ourselves starting to question the level of learning expected in some undergraduate courses as these often appeared to be at an inappropriately high level. This seems to be a common experience across colleges as they design higher level programs. We plan to critically evaluate the undergraduate courses during the next systematic evaluation cycle.

Our regional accreditation commission (NCA) also states that a master's program must facilitate attainment of a level of knowledge and abilities consistent with those expected of a 'master' of the field. By graduate community standards, this generally implies evidence that the graduate is able to integrate learning from the entire program, demonstrated in a culminating experience involving research. This is consistent with the Essentials 'capstone' experience. While some of our faculty questioned the requirement of a capstone thesis or project, and some graduate nursing programs are considering eliminating these, we decided that we would require an experience which includes a thesis or application of research in a clinical project. In doing so we will be consistent with the Essentials as well as our regional accrediters in higher education.

The organizations that guide the role and education of *advanced practice nursing* and *nurse practitioner* include:

–American Nurses Association (ANA)

"Nursing's Social Policy Statement"

"Scope and Standards of Advanced Practice Nursing"
–American Academy of Nurse Practitioners (AANP)

"Position Statement on Nurse Practitioner Curriculum"

"Standards of Practice"
–National Organization of Nurse Practitioner Faculties (NONPF)

"Advanced Nursing Practice: Curriculum Guidelines and Program Standards for Nurse Practitioner Education"
–American Nurses Credentialing Center (ANCC)

"Advanced Practice Certification Catalog: Guidelines for Educational Preparation of Family Nurse Practitioners"

Overall, the faculty found it extremely helpful to review these documents and other publications of these organizations in implementing the Essentials model and could easily identify the parallel among the guidelines.

'Non'-Essentials

Institutional Mission and Needs

The Essentials document states that the model for advanced practice should be tailored to the mission and needs of the school. Accrediting bodies also look for evidence that the institutional mission is used as a basis for program development. Therefore, we reviewed our college mission and goals for conceptual themes that should be integrated with the Essentials, from program philosophy to graduate competencies. These included:

1) 'community (service/care)'–we have a heavy community focus throughout our undergraduate program and now the MSN as well.

2) 'research utilization'–the advanced research course and project will focus on research utilization. This direction is compatible with the Essentials model which identifies research utilization as the appropriate focus of master's education.

3) 'experiential learning'–our master's program integrates a strong clinical focus as evidenced by a minimum clinical requirement of 675 hours in the FNP program. This requirement is beyond the 500 hours recommended by NONPF and that required in many nurse practitioner programs.

4) 'preparation of graduates for advanced study'–based on this statement we included a thesis option as a capstone experience for graduates who intend to pursue doctoral study.

5) 'foundation in humanities, social sciences, and natural sciences'–Our master's curriculum does not require additional courses in these sciences, nor does the Essentials model. Based on this statement in our mission and the fact that our accrediting bodies would look for evidence of this in our MSN program, we decided to include 'graduation from an NLN accredited BSN program' as a criteria for admission. The NLN criteria for undergraduate programs require course work in these areas; therefore, we determined that this admission requirement would provide evidence that this mission statement was used in the MSN program development.

Geographic Needs

The Essentials document states that the model should also be tailored to characteristics of the geographic area. Therefore, we spent some time considering characteristics of Iowa and the counties that our graduates are likely to practice in. These characteristics were then integrated with the Essentials model in course descriptions, objectives, learning experiences, and program outcomes. For our program these characteristics included:

1) Rural–98 Iowa counties are defined as non-metropolitan. Based on the rural designation and resulting limited access to health care of much of the state, 84 Iowa counties are designated as health professional shortage areas (HPSA) or medically under served areas (MUA) by the federal government. Therefore, a rural focus is incorporated into course objectives and clinical experiences in the FNP program.

2) Elderly–About 25% of Iowans are over the age of 65 years. While the focus of FNP practice is life cycle rather than a specific age group, we decided that we must place a certain emphasis on the elder end of continuum.

3) Immigrant/migrant agricultural worker influx (Bosnian, Hispanic)–Iowa is an agricultural state; thus, we must meet health care needs of a growing population of seasonal migrant farm workers. In addition, we have experienced a recent immigration of Bosnian families into the area seeking employment in the meat-packing industry. Because of inexperience with culturally-diverse groups, our health care community has been inadequately prepared to meet the multifocal health needs of these groups. Therefore, we felt a need to expand the multicultural emphasis cited in the Essentials, by including didactic and clinical experiences related to the special needs of these groups.

4) Other Programs—Accrediting bodies recommend that institutions initiating new programs review curricula of other programs so that the curriculum includes the content and experiences generally expected at that level of education. While the Essentials model has done this work for us, we felt it beneficial to review curricula from benchmark programs and other master's and FNP programs in the Midwest and the state. We reviewed about 20 master's and/or FNP programs, both within and outside of our region. While most programs seemed to include the content areas described in the Essentials model, it was often difficult to make comparisons because of the diversity in program designs. Overall, we found that the Essentials document provided the most explicit guideline for curriculum design.

Other geographic characteristics may influence program development. Iowa is very fortunate to have the Iowa Communications Network (ICN), a fiberoptic technology which 'networks' health and educational systems throughout the state. This system facilitates transmission of educational programs from an originating site to multiple locations across the state. While we already transmit CEU programs and college courses with this system, there have been recent early discussions among nursing programs in Iowa regarding the feasibility of 'cooperative programming', with core courses offered over the ICN accepted for credit by multiple colleges. A college might offer its advanced pathophysiology course on a rotating schedule with other colleges, thus facilitating cost-effectiveness for all institutions. While this type of cooperative plan may be some time away, we felt it wise to take a look at the curriculum structure of other programs in Iowa in anticipation of this possibility.

Student Needs

Student needs and characteristics that influenced our program planning include the following:

1) Flexibility—Similar to all graduate programs enrolling working individuals, we need to plan a flexible program. At this time we do not know exactly what scheduling needs our prospective students have. We plan to survey individuals who have expressed interest in relation to these needs.

2) Distance Learning–The rural nature of our geographic area means that nurses pursuing advanced education must travel sometimes great distances to obtain courses that meet program requirements. We would like to offer our entire program over the ICN in the future, but this will require approval from NCA. For now we plan to offer isolated courses via distance education as need and resources permit. The cooperative programming possibility discussed above will also facilitate needs in this area.

Program Design

Mission/Philosophy/Program Objectives

The development of program mission and philosophy as the foundation to guide the curriculum and entire program must be undertaken in an analytical manner and must be based on several components:

1) Institutional Mission
2) Community/Student Population
3) Faculty Beliefs regarding graduate education and practice
4) Accreditation/Approval Criteria
5) Professional Standards: 'THE ESSENTIALS'

How was the Essentials model used in design?

Multiple reviews of the Essentials document were necessary for our faculty in order to fully comprehend the underlying assumptions and explicit guidelines that would drive the philosophy and program design. If we hoped to support the goal of AACN to enhance consistency in educational standards and anticipated competencies of master's prepared nurses, we needed to be sure we understood the model and applied it as intended.

As indicated earlier, the ten content areas included in the graduate core and advanced practice core of the Essentials model are presented with a discussion of: 1) purpose/goal of the content and 2) competencies of the graduate as a result of the content. As also indicated earlier, the competencies for each content area are stated at a level of performance that requires learning from multiple courses. Therefore, many of the competencies may appropriately guide the statement of program mission, philosophy, and program outcomes. From the purpose and competency statements we identified global characteristics/outcomes of master's education that would be integrated into our program mission, philosophy and program outcomes:

1) Critical Thinking and Decision Making
2) Effective Communication
3) Analyze, Synthesize, Utilize New Knowledge
4) Research Utilization

5) Management of Resources in Multiple Systems of Care
6) Leadership within the Interdisciplinary Team
7) Promotion of Quality Care Based on Ethical, Legal, and Professional Standards
8) Community-based Health Promotion and Disease Prevention
9) Clinical Competence in Management of Health Problems

Each of these outcomes is visible in our MSN program mission and curriculum objectives. While the terminology may vary somewhat, it is likely that other faculty would identify these same characteristics/outcomes.

Curriculum Structure

Based on our analysis of the Essentials and NON-Essentials described above, we concluded that the Essentials model provided a curriculum structure that we were comfortable with, was consistent with benchmark programs, and could certainly be tailored toward our particular mission and geographic needs. Therefore, in the interest of AACN's goal toward consistency in educational programming and our need for time-conservation, we decided to design our curriculum based as much as possible on the Essentials model:

GRADUATE CORE CURRICULUM

Essentials	Allen College
Research	Advanced Nursing Research
Theoretical Foundations for Nursing Practice	Theoretical Foundations for Nursing Practice
Policy, Organization, and Financing of Health Care	Policy, Organization, and Financing of Health Care
Health Promotion and Disease Prevention	Health Promotion and Disease Prevention
Ethics	Social and Ethical Issues in Nursing Practice
Human Diversity and Social Issues	
Professional Role Development	Professional Roles: Advanced Practice Nursing

ADVANCED PRACTICE CORE CURRICULUM

Advanced Health/Physical Assessment	Advanced Health Assessment
Advanced Physiology and Pathophysiology	Advanced Pathophysiology
Advanced Pharmacology	Advanced Pharmacology

SPECIALTY CURRICULUM

Family Nursing: Child, Adolescent, and Women's Health
Family Nursing: Adult and Older Adult

OPTION: Advanced Community Health

CAPSTONE

Clinical Integration for Advanced Practice or Thesis

Because the courses in the *graduate core* are 'core' for all master's students including those in nursing administration, community health and other functional roles, we were cautious not to specify 'advanced practice nursing' in the title, description, or objectives. Although our courses are not fully developed yet, we plan to design these in accord with the emphasis presented in the Essentials model. The focus of the research content in the model is research utilization as well as computer applications in use of databases, etc. The theory course will focus on biological, social, and organizational theories that guide the advanced practice role. The policy, organization and finance course will focus on health care policy, systems of care, sources of reimbursement, and cost-effectiveness issues. Health promotion and disease prevention will focus on personal, social, and environmental influences on health and function. We decided to combine the ethics and diversity courses into one course (social and ethical issues) which will address cultural, ethnic, gender and age-related issues in delivery of care as well as societal problems and ethical decision-making. While the 'professional roles development' content as described in the Essentials model is intended for all functional roles including advanced practice specialties, administration, community health, etc., we decided to tailor our first roles course specifically for advanced practice specialties. In the event we wish to offer a track for administration, community health, or another functional role, we believe is will be necessary to design a course specifically for these function roles and title the course accordingly. According to the Essentials model, the research content should be a separate course while the other content areas may be integrated as appropriate or desired within the curriculum.

The *advanced practice core curriculum* in the model is consistent with most programs we reviewed and was adopted for our program. The Essentials document states that all advanced practice programs should include a 'basic' pathophysiology course. We questioned this based on the mandate that graduate courses are at a higher level than undergraduate and the belief that undergraduate nursing programs include basic pathophysiology content, either integrated into nursing courses or in a separate course. For these reasons, we decided to title our course advanced pathophysiology. According to the Essentials model, the three advanced practice core content areas should be separate courses.

As directed in the Essentials document, *specialty curriculum* courses should be designed based on guidelines from respective organizations. Courses in our FNP curriculum were designed based on criteria from NONPF, AANP, and ANA/ANCC.

Because of our institutional and program emphasis on community, we have included an *advanced community health* course as an option for students who wish to prepare for population-based care. Consistent with the Essentials recommendation as well as the expectation of most graduate programs within and outside of nursing, we decided to require a *capstone* experience in order to assess the student's ability to integrate content throughout the curriculum. Those individuals not planning to enter doctoral studies with be encouraged to complete a clinical project, such as research utilization or another experience based on the student's interest. Those planning to enter doctoral studies will be encouraged to complete a

thesis. For either capstone experience, the student will be required to submit work in both written and oral forms in order to evaluate ability to communicate in a scholarly manner.

The Essentials model identifies 'core' information to be included in each of these courses. We incorporated this core information, but then 'enriched' the courses based on:

1) Institutional Mission--the community health optional course was included consistent with our institutional mission toward community health/needs.

2) Geographic Characteristics--All courses will emphasize rural health needs and elderly. For example, the theories course will incorporate theories of aging; social and ethical issues will focus on elder-related issues, such as elder abuse; and assessment and pathophysiology will incorporate changes with aging.

3) Other--Throughout the Essentials model, informatics is integrated only into the research content. We determined that our goal was to increase exposure to informatics as a tool for nursing practice in general rather than research specifically. Therefore, we will integrate informatics into other courses to the extent possible. For example, we will have students using data bases to evaluate outcomes of care in the policy course, and to assess epidemiological data in the health promotion course.

Course Descriptions/Objectives

Once the decision was made to tailor the overall curriculum structure after the content area structure in the Essentials model, the development of course descriptions and objectives was relatively straightforward. Again, the discussions of content area purpose and competencies were used as a basis for this task:

Example: Course: Professional Roles-Advanced Practice Nursing
Content Area: Professional Role Development
Purpose: Facilitate role transition and integration of new functions
Competencies:
-communicate and work in collaborative relationships...
-assume role of advocate for client, profession...
-actualize advanced practice roles of teacher, researcher, clinician, consultant, manager...
-negotiate one's role within the system...
-effect change within the health care system...
-articulate differentiated advanced practice...

For each course description, the purpose/goal and competencies of the respective content area were analyzed and integrated into a broad statement of overall course content. The competencies were then analyzed for specific content/learning behaviors that would be necessary to achieve the competencies, and these became course objectives and items for the topical outline. For example, in order to function as an advocate and change agent, content related to change theories, conflict resolution, and leadership would be included. In order to articulate and function in differentiated advanced practice roles, content regarding the

evolution of advanced practice roles, interdisciplinary functions on the health care team, and legal/regulatory controls would be needed.

Systematic Evaluation

The following diagram illustrates how the Essentials model was used to design the overall curriculum structure and, ultimately, graduate outcomes:

Content Area Competencies

.

.

Program Objectives

.

.

Graduate Performance

The competencies described for each content area in the Essentials model identify what is expected of the graduate of the program, as determined by the individuals and professional organizations that collaborated on the Essentials model. These competencies provided the foundation for our overall program objectives, which, in turn, will provide the framework for our measures of graduate performance (e.g., graduate and employer surveys). In this manner, our graduate performance measures will provide the evidence of how well we designed and implemented our curriculum based on the Essentials.

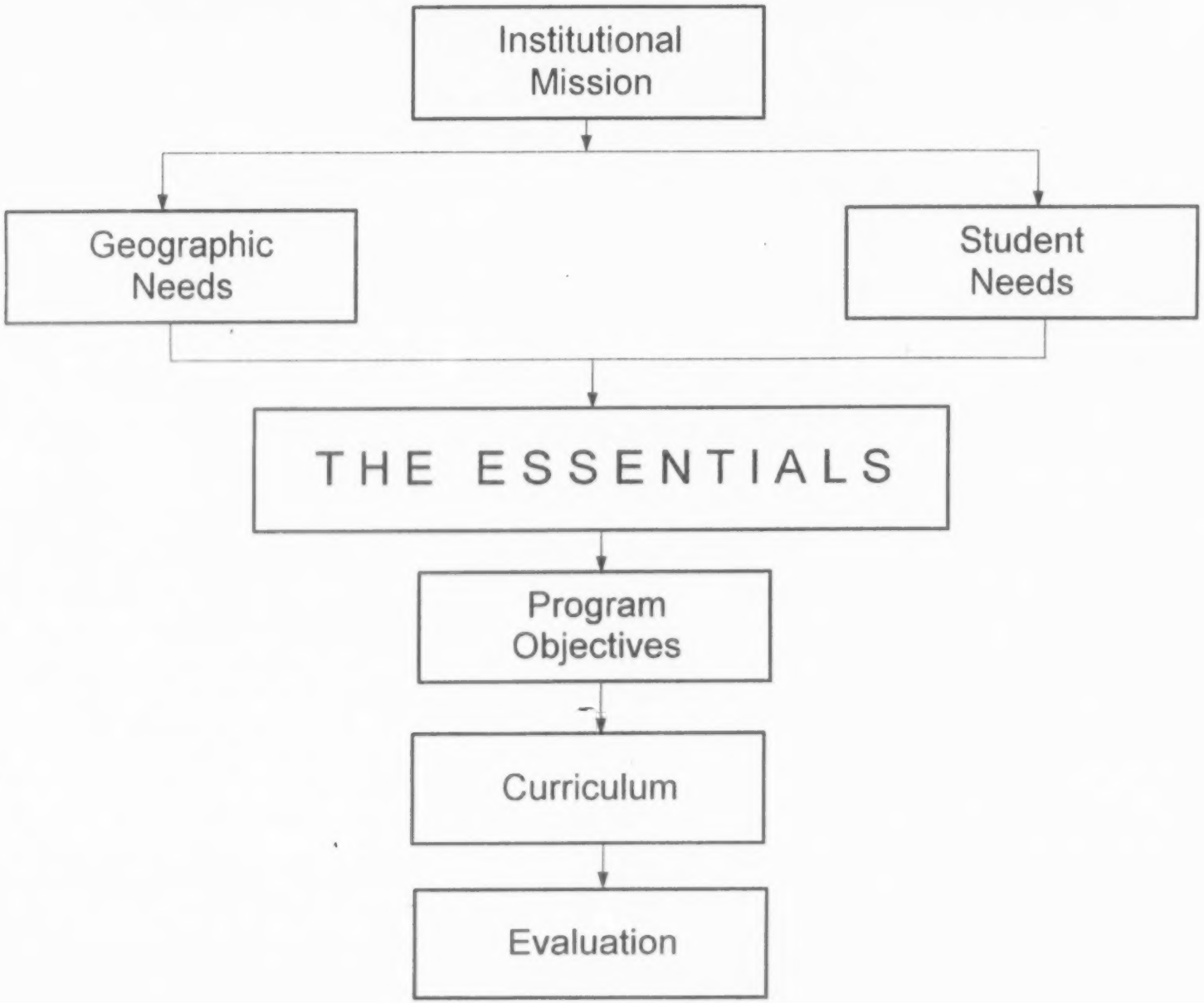
A 'Model'

In addition to reading the brochure for this conference and discovering that I had 60 minutes to say "the Essentials model is our curriculum", I also discovered that, according to the session title, I was to present a 'model of implementation'. To most of us this means a pictorial representation, which I have attempted on the next slide (see attached). The model is based on common models of curriculum development which the primary role of the Essentials model highlighted.

Progress and Conclusions

Well, we did not receive the grant, but we are re-submitting and are hopeful. Our regional accreditation visit by NCA for graduate program status was completed in October and we anticipate receiving final approval in February. We submitted our proposal to the Iowa Board of Nursing two weeks ago and anticipate approval on December 11. Pending both approvals, we will begin the family nurse practitioner program next fall. The nurse educator on our NCA team was extremely complimentary of our curriculum structure and our use of the Essentials model as a guiding framework. The Essentials model facilitated accomplishment of our task and resulted in a curriculum that we are confident will produce graduates who are clinically and professionally competent practitioners.

A Model for Implementing THE ESSENTIALS



Managed Care Curriculum: An Essential Component of Cure Curriculum

M. SUSAN EMERSON, PhD, ARNP, CS, *Clinical Assistant Professor*
University of Missouri, Kansas City

I WANT TO THANK the American Association of Collegiate Nurses for inviting me to share this faculty development program with you. I would like to acknowledge the leadership and futurist thinking of Nancy Mills, Dean of the University of Missouri-Kansas City School of Nursing who made this project a reality. For without Dean Mills and several other leaders in the Kansas City area, such as, Mike Wood Executive Director and Adjunct Professor of the National Center for Managed Health Care Administration, Bloch School of Business and Public Administration at the University of Missouri-Kansas City this project would have stayed conceptually a great idea. An idea that makes good common sense as starting point when undertaking a major curriculum change but in actuality is rarely done. Faculty development when given value can be the catalyst of change.

I have been asked to share a program which was implemented in the Kansas City area during the 96/97 academic year to educate the nursing faculties members of the local nursing schools about the major concepts of managed health care.

This morning I will share with you enough about the program as to stimulate creative ways that other schools may stimulate their faculties into becoming energized, involved and commented to changing curricula to meet the challenge of the new health care industry.

The objectives of this presentation are threefold:

1. To assist you as leaders in your own nursing programs to recognize that faculties need to be educated to the changes in the health care environment. In order to partner with service. Before faculties are able to effectively adapt the new concepts into a curriculum, faculties need to understand the concepts and express that the new concepts are necessary
2. To identifying the essential components of managed care that need to be incorporated into an advanced practice nursing curriculum. The components that prepare graduates to meet the health care market place informed, and ready to participate as a nurse provider and leader no matter what level of education preparation.
3. To share the Kansas City experience so that you may understand the benefits of working in partnership with the managed care industry to prepare advanced practice nurses for the next century.

The presentation is organized into four major sections:

1. the history of how the "Managed Care Workshop for Nursing Faculty" was conceived and developed;
2. the collaboration between academic leaders, faculties and community managed care leaders to a common goal, the desire to have prepared nurses for the next century;
3. workshop structure and content; and
4. the changes to curricula as a result of the first year workshops and the effect the workshops had on the Kansas City schools of nursing.

As discussed throughout this conference, the delivery system of American health care has drastically changed since the eighties. Following the end of the Korean War new treatments and improved technology have become the standards of practice resulting in health care cost silently escalated.

By the 1990s, Health Care as an industry represent 14 percent of the U. S gross domestic product(GDP). The inflation rate of health care surpassed all other products in the U. S. Major purchasers of health care, employers and government, were spending more for health care than for the raw materials necessary to maintain their businesses. The market place solution to control health care cost has been to shift from a single direct fee for system model to multiple group managed care models.

President Clinton's 1992-93 failed attempt to reform the health care industry sent a strong message to health care leaders that change would either be their creation or mandated by law makers. Managed care organizations seized the leadership position making significant reforms in how health care is and will be delivered. Today, 70 to 80 per cent of the commercial health care market, which is provided as employee benefits, are now provided through managed care organizational models. The newest addition to the managed care model is the government's recognition that inflation of federally sponsored health care programs, Medicare and Medicaid, must be halted. The government has recently opened Medicare to managed care plans. In the first year, the Health Care Financing Administration (HCFA) reported 70,000 voluntary changes to Medicare HMOs. Presently, Medicaid recipients in all fifty states are offered some variation of managed care. In some states Medicaid recipients are mandated into managed care organizations.

As mentioned in this conference the type of illness has also changed, three-fourths of all health care in the nineties is chronic care rather than acute care. The increasing age of the general population of the United States will increase the chronic care needed. Population care and management of diseases are the future.

A history of how the faculty development program which was called "Managed Care Workshop for Nursing Faculty" was developed as a result of multiple factors.

The deans and chairs of fourteen Kansas City metro area nursing schools have a collaborative group to support each other in similar curriculum and faculty issues and when possible share in problem solving. The task of integrating managed care into all the curricula was identified by the group as a common problem. The group felt that their faculties expertise with the concepts of managed care were limited thus the need to find a common solution.

A myriad of reports from nursing leadership organizations and independent health care analysis were articulating the need to integrate managed care into the all health care professional curricula. Most of the reports recommended that a course or courses in managed care would not be adequate, that entire curricula must be redesigned.

The 1995 Pew Health Professions Commission's report outlined six core concepts that health care professionals curricula needed to be restructured around. The six concepts included: care is population-based; all participants in health care are held accountable; participants use information to assure value and quality; primary care is of central importance; interdependence is accorded greater importance; and the link between finance and delivery is explicit.

ANA's managed care curriculum published in 1996 was a beginning but it was limited, and focused solely on baccalaureate education. It was strongly felt by the KC group that all levels of nursing education needed to be restructured to include managed care.

AACN's *Essentials of Master's Education for Advanced Practice Nursing* (1996) outlined a core curriculum content that sounded like managed care concept. The core was identified as policy, organization and financing; ethics, research, professional role development; theoretical foundations of nursing practice; human diversity and social issues; and health promotion and disease prevention

National Organization of Nurse Practitioner Faculties (NONPF, 1990) in their *Advanced Nursing Practice: Nurse Practitioner Curriculum Guidelines* defined the competencies that nurse practitioners graduates should possess at graduation. The identified domains and competencies are also principles needed to navigate successfully in the new health care environment. The domains and competencies are: monitoring and ensuring the quality of health care; managing and negotiating health care delivery systems; professional role; teaching-coaching; nurse-client relationship; and the management of client/health/illness status.

The nurse executives and nurse educator of Kansas City formed a consortium to identify what the nurse of nineties needed to look like and to suggest what curricula changes needed to be made to educate these nurses. The two group merged the market places need for nurses and educational preparation. The consensus of the group was that all levels of nurses are needed for the managed care delivery system and that all nurses need to be educated to the principles of the system. The final recommendation was that all schools of nursing need to readjust their curricula to include the integration of managed care.

Now faced with a mission, the KC Nurse Collegiate Educators needed to educate their faculty members to the need for change to an integrated managed care curriculum. Two hundred and fifty-nine faculty members were identified by the fourteen schools as being potential catalyst of change or potential roadblocks.

Kansas City fortunate to be a Robert Wood Johnson Foundation "Colleagues in Caring" grant site focus is to build a nursing workforce capable of functioning in the rapidly changing health care system. The challenge of this project is to bridge the gap between education and practice. Although wonderful, the grant falls short in that it does not provide for the education of nurse educators.

The Prime Health Foundation is an organization whose purpose is to fund projects which support the delivery of quality health care through managed care systems and spread knowledge about managed health care concepts, practices and results. A grant was written targeting the second purpose of spread knowledge about managed care concepts, practices and results. The Prime Health Foundation funded a grant of $71,250 to support the reeducation of nursing faculty to managed care concepts and practices.

While money was a factor, commitment from academic and managed care leaders was essential in order free the faculty to attend and to have the need expertise from managed care.

Managed care organizations committed their expertise and time to the project by providing expert presenters and providing their organizations for clinical experience for the mentorships.

An advisor panel comprised of nurse executives, nurse educators, managed care executives, and business educator designed the workshop and mentorship objectives.

The panel agreed to a set of basic assumptions that facilitated implementation of the workshops. The assumptions were important to focus the presenters, to encouraging flexibility and revision of the content, and to use the time most effectively. The assumptions were: to respect the variety and depth of talent of the attendees; to recognize that the faculty members were adding the workshop to their already full assignments; that in order to achieve the outcome wanted, the faculty must recognized that managed care is needed in their curricula; that the workshop needs to provide tools that will facilitate curricula change, and finally that the workshop itself content and speakers be tied together from one workshop to the next and revisions made immediately.

The workshop objectives were: to appreciate traditions of managed care; compare methods of risk sharing between fee for service and managed care systems; explore new payor systems in managed care, discuss nursing roles; analyze the relationship of managed care and health care policy; relate concepts of financial management and budgeting; examine ethical issues in managed care; and develop managed care curricula for preparation at various levels of nursing education.

The workshop used a variety of teaching modules to stimulate discussion and to build connections between faculties. Small group projects stimulated the networking between faculties. The faculty were given a in-depth workbook of articles, overheads, internet resources on each of the major topic areas covered which they were encouraged to use in their classrooms. Case studies of real situations were used to illustrate budget, case management and disease state management concepts. Thirty-three hours of continuing education credit was given for their attendance. The last day the faculty synthesized all the information given and developed curricula for all levels of nursing education.

I would like to share with you each day of the workshop content.

Day 1 was designed to open the attendees to appreciate the traditions of managed care by examining their own belief systems, by learning about the history of managed care. Models, compensation systems and general terminology of managed care were explained so faculty had a foundation to build concepts on.

Myths of managed care is an example of a change made with the third workshop. It was observed that the first two workshops frequently dealt with personal experiences and values

about managed care through out the workshop. Often this consumed a lot of time, energy and sometimes down a path with no group benefit. Myths of managed care is small group activity where the attendees examine their own values/beliefs systems in reference to managed care, especially examining the multitude of roles each hold in health care, the nurse as a primary provider, educator, manager, patient advocate. The group would develop from their beliefs a definition of managed care. This exercise opened the discussion for the entire workshop with no one personal agenda dominating. A list of the beliefs/values were given to each presenter to review prior to their presentation so that issues could be addressed directly and perceptions corrected.

The history shows the attendees that managed care is not new but a renewed concept of health care delivery with its roots dating back to 1588. Key terms of managed care are reviewed; terms such as quality, risk, risk pools, access, capitation, fee for service, managed fee for service and utilization rates.

Models and compensation systems follow with an explanation of such terms as staff/group models, PPO, POS, HMO, IPA and combinations of all. The models are discussed as to their advantages and disadvantages, their utilization, the Kansas City market past and present and finally the national market.

Day 2 reviews the accreditation of managed care organizations through the National Commission for Quality Assurance (NCQA). The process, standards, and benchmarking are discussed. HEDIS, the Health Plan Employer Data and Information Set, a set of 65 standardized performance measurements designed to ensure that purchasers and consumers have information they need to reliably compare the performance of managed health care plans is explained. How the HEDIS measurements are used by NCQA are discussed in length.

Pre, concurrent and post case management is explained and actualized by review of case studies. Terms such as credentialing, outcome measurements, benchmarking, process evaluation the multitude of provider roles are discussed.

Day 3 uses case studies to again illustrate how in different systems case management is operationalized. New payor systems such as the new Medicare HMOs and Medicaid programs are reviewed.

Day 4 starts with financial and budgeting concepts, probably the most difficult concepts for the group to grasp and the concepts most appreciated by the groups. This presentation has been revised to include a group activity designed around a case study. Health care policy is also discussed examining the two way knife relationship that exist between managed care systems and health care policy. The relationship of developing policy versus reacting to mandated policies.

The fourth day starts the shift to focusing on the roles of the nurse in managed care at every level of education. A nurse executive of a managed care organization discusses all the possibilities for nurses in this market and the roles nurses should seize before other professions do so.

Day 5 opens by looking at the ethical issues of managed care. Kansas City is privilege to have several expert bioethicist in the area and this presentation has become one of the

attendees favorite. It is also a time where personal beliefs and values are reexamined from the first day with the content of new information and a boarder perceptive of managed care.

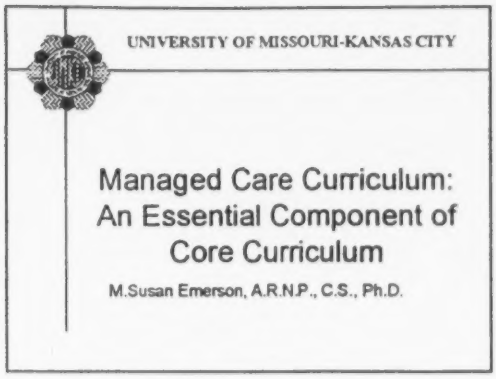
The workshop then reviews the relationship of nursing models and managed care. The majority of the day is spent in breakout groups that develop core curricula for each level of nursing education. The curricula developed at each of the workshops have been fairly consistent containing the same key points. The key points the faculty consistently identified at all the workshops were: that managed care needs to be integrated throughout the curricula rather than by an added course; managed care needs to be integrated into all curricula no matter what the level; that the same emphasis areas need to be in each level of nursing education but that the depth is the different between the levels. The emphasis areas should include: quality improvement, disease state management, more business, population-based focus, epidemiology, use of such outcome measurements as benchmarking.

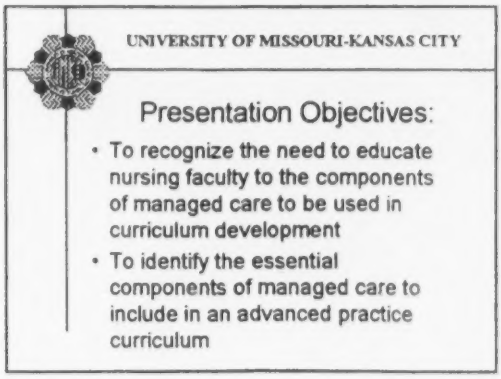
In addition to the workshop, each school of nursing sent one faculty member who had completed the workshop for an intense week of mentorship with a managed care executive to experience the application of the managed care concepts. This faculty member was to share the experience with her/his faculty thus enriching the entire faculty.

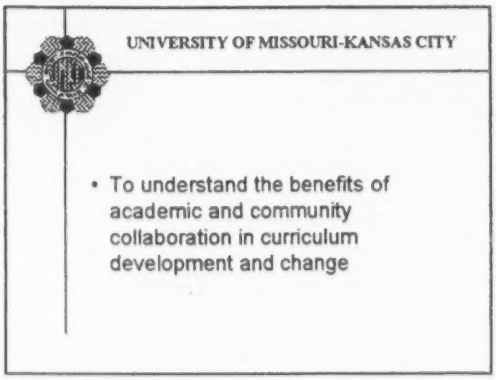
One hundred forty-four faculty members completed the first year workshops. The response was positive from both faculty and managed care executives. The Prime Health Foundation has funded a second year of four workshops, plus two all day up-date sessions for the faculty who attended the first year. The up-date sessions were requested by the first year faculty to keep them current on the changes in the industry.

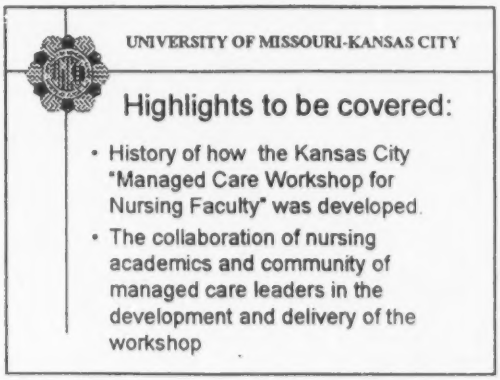
The outcomes from the workshops far exceeded the planners and funders expectations. The most dramatic outcomes were immediate curricula changes, two schools started the integration of managed care concepts throughout their curricula. Another school started by changing a major course title and content to population-based care. This change was implemented with the fall curriculum.

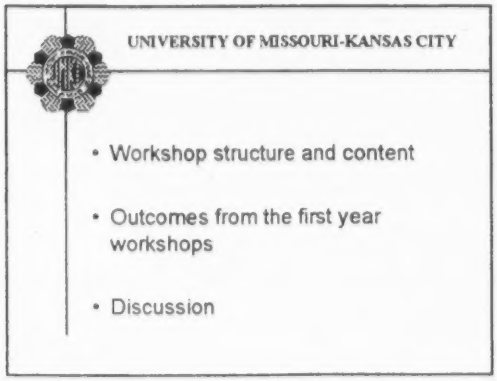
The networking among faculties has been reported to have continued into this academic year. Faculty have become resources for each other and across levels. The partnership between faculty and managed care leaders continues to grow. Managed care organization are providing new clinical experiences for students in disease state management, case management and leadership. A fundamental principle of change is to involve the person who must change in the process and empower them with the capability to make change and it will occur.

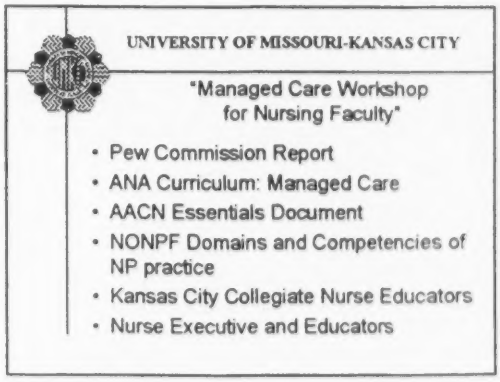

UNIVERSITY OF MISSOURI-KANSAS CITY
Managed Care Curriculum: An Essential Component of Core Curriculum
M.Susan Emerson, A.R.N.P., C.S., Ph.D.


UNIVERSITY OF MISSOURI-KANSAS CITY
Presentation Objectives:
• To recognize the need to educate nursing faculty to the components of managed care to be used in curriculum development
• To identify the essential components of managed care to include in an advanced practice curriculum


UNIVERSITY OF MISSOURI-KANSAS CITY
• To understand the benefits of academic and community collaboration in curriculum development and change


UNIVERSITY OF MISSOURI-KANSAS CITY
Highlights to be covered:
• History of how the Kansas City "Managed Care Workshop for Nursing Faculty" was developed.
• The collaboration of nursing academics and community of managed care leaders in the development and delivery of the workshop


UNIVERSITY OF MISSOURI-KANSAS CITY
• Workshop structure and content
• Outcomes from the first year workshops
• Discussion


UNIVERSITY OF MISSOURI-KANSAS CITY
"Managed Care Workshop for Nursing Faculty"
• Pew Commission Report
• ANA Curriculum: Managed Care
• AACN Essentials Document
• NONPF Domains and Competencies of NP practice
• Kansas City Collegiate Nurse Educators
• Nurse Executive and Educators

UNIVERSITY OF MISSOURI-KANSAS CITY

History: Pew Commission Report

Six Core Concepts

1. Managed Care as Population-based Care
2. Accountability
3. Using Information to Assure Values
4. Importance of Primary Care

UNIVERSITY OF MISSOURI-KANSAS CITY

5. Greater Emphasis on Interdependence
6. Explicit Linkage of Finance and Delivery

UNIVERSITY OF MISSOURI-KANSAS CITY

ANA Managed Care Curriculum

Focused on baccalaureate education only

UNIVERSITY OF MISSOURI-KANSAS CITY

AACN Essentials for MSN

- Policy, Organization and Financing of Health Care
- Ethics
- Research
- Professional Role Development
- Theoretical Foundations of Nursing Practice

UNIVERSITY OF MISSOURI-KANSAS CITY

AACN Essentials for MSN

- Human Diversity and Social Issues
- Health Promotion and Disease Prevention

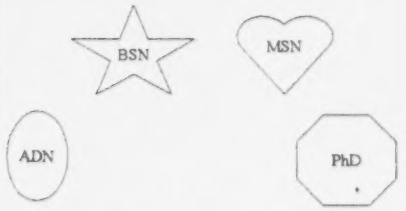
UNIVERSITY OF MISSOURI-KANSAS CITY

NONPF Domains & Competencies

- Management of Client/Health/Illness Status
- Nurse-Client Relationship
- Teaching-Coaching
- Professional Role
- Managing and Negotiating Health Care Delivery Systems
- Monitoring and Ensuring the Quality of Health Care

UNIVERSITY OF MISSOURI-KANSAS CITY

Kansas City Nurse Executives and Nurse Educators



UNIVERSITY OF MISSOURI-KANSAS CITY

Collaboration with Managed Care

- Funding for the Workshops
- Advisor Panel
- Commitment of Sponsorship for Workshop and Mentorship by Managed Care Organizational Leaders

UNIVERSITY OF MISSOURI-KANSAS CITY

Funding

Prime Health Foundation Grant

UNIVERSITY OF MISSOURI-KANSAS CITY

Advisor Panel

★Nurse Executives
★Managed Care Leaders
★Nurse Educators
★Business Educator

UNIVERSITY OF MISSOURI-KANSAS CITY

Managed Care Organizations

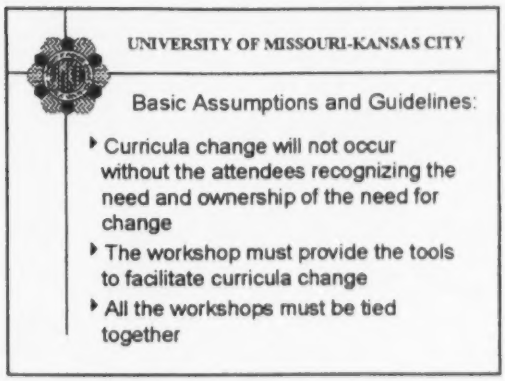
Commitment to support the Workshops and Mentorships

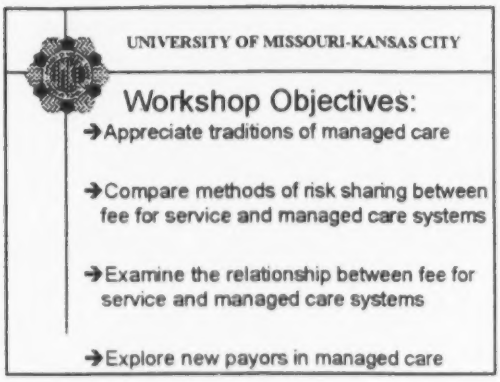
- Experts and Leaders in the field of managed care to teach
- Use their leadership and organizations for mentorships

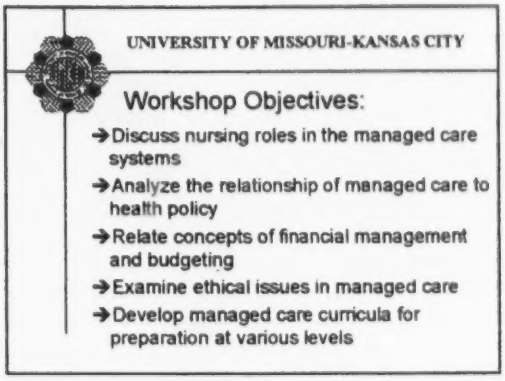
UNIVERSITY OF MISSOURI-KANSAS CITY

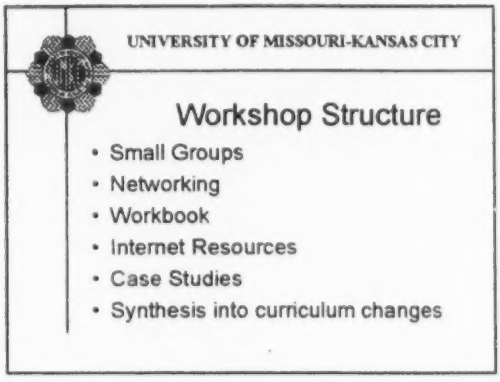
Basic Assumptions and Guidelines:

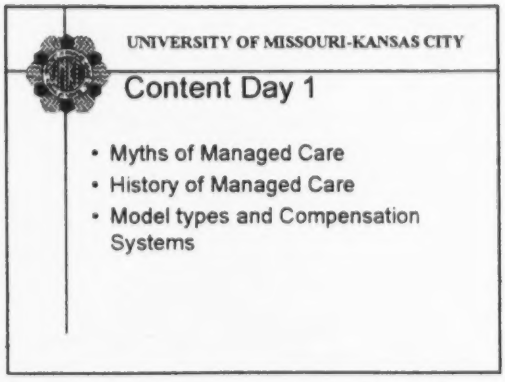
- Respect the variety and depth of talent of the attendees
- All attendees were adding the Workshop to their already full assignments
- Workshop changes would be necessary and immediate

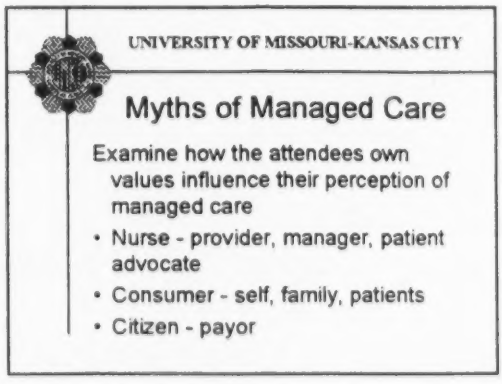

UNIVERSITY OF MISSOURI-KANSAS CITY
Basic Assumptions and Guidelines:
Curricula change will not occur without the attendees recognizing the need and ownership of the need for change
The workshop must provide the tools to facilitate curricula change
All the workshops must be tied together

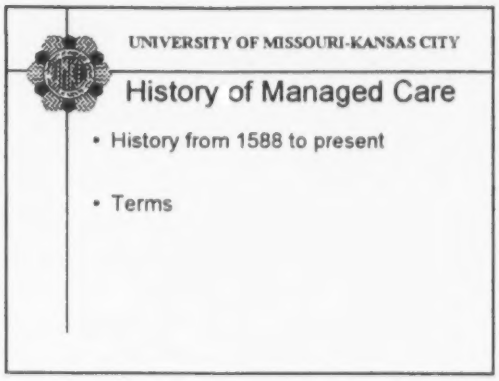

UNIVERSITY OF MISSOURI-KANSAS CITY
Workshop Objectives:
→Appreciate traditions of managed care
→Compare methods of risk sharing between fee for service and managed care systems
→Examine the relationship between fee for service and managed care systems
→Explore new payors in managed care

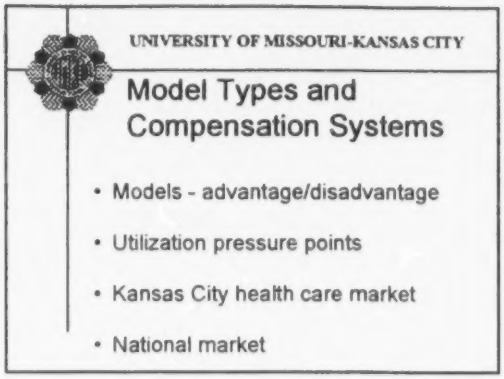

UNIVERSITY OF MISSOURI-KANSAS CITY
Workshop Objectives:
→Discuss nursing roles in the managed care systems
→Analyze the relationship of managed care to health policy
→Relate concepts of financial management and budgeting
→Examine ethical issues in managed care
→Develop managed care curricula for preparation at various levels

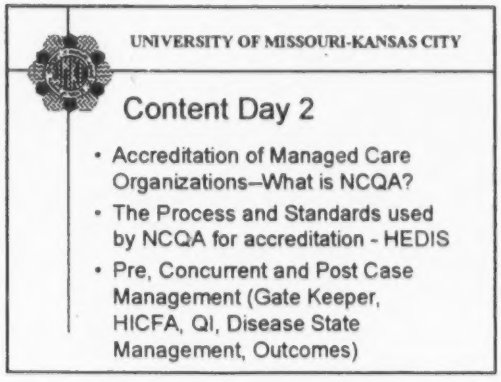

UNIVERSITY OF MISSOURI-KANSAS CITY
Workshop Structure
Small Groups
Networking
Workbook
Internet Resources
Case Studies
Synthesis into curriculum changes

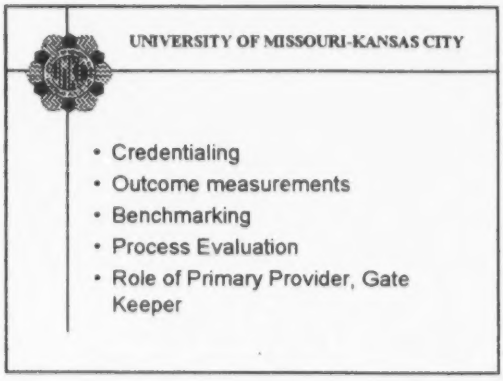

UNIVERSITY OF MISSOURI-KANSAS CITY
Content Day 1
Myths of Managed Care
History of Managed Care
Model types and Compensation Systems

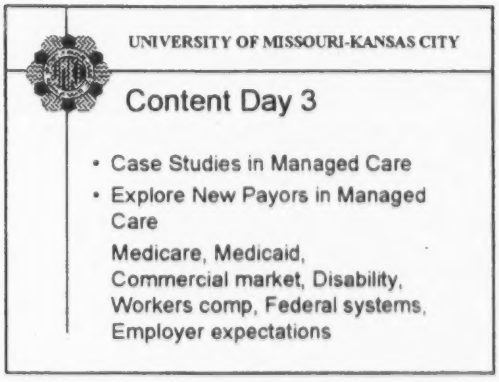

UNIVERSITY OF MISSOURI-KANSAS CITY
Myths of Managed Care
Examine how the attendees own values influence their perception of managed care
Nurse - provider, manager, patient advocate
Consumer - self, family, patients
Citizen - payor

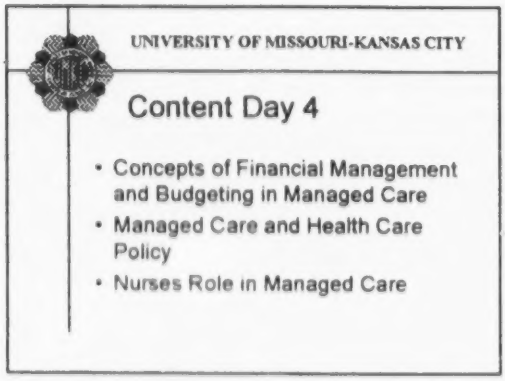

UNIVERSITY OF MISSOURI-KANSAS CITY
History of Managed Care
• History from 1588 to present
• Terms

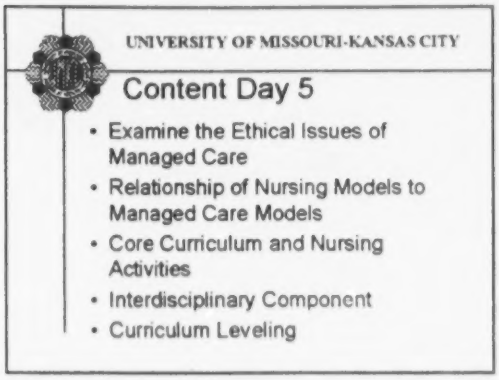

UNIVERSITY OF MISSOURI-KANSAS CITY
Model Types and Compensation Systems
• Models - advantage/disadvantage
• Utilization pressure points
• Kansas City health care market
• National market


UNIVERSITY OF MISSOURI-KANSAS CITY
Content Day 2
• Accreditation of Managed Care Organizations--What is NCQA?
• The Process and Standards used by NCQA for accreditation - HEDIS
• Pre, Concurrent and Post Case Management (Gate Keeper, HICFA, QI, Disease State Management, Outcomes)


UNIVERSITY OF MISSOURI-KANSAS CITY
• Credentialing
• Outcome measurements
• Benchmarking
• Process Evaluation
• Role of Primary Provider, Gate Keeper

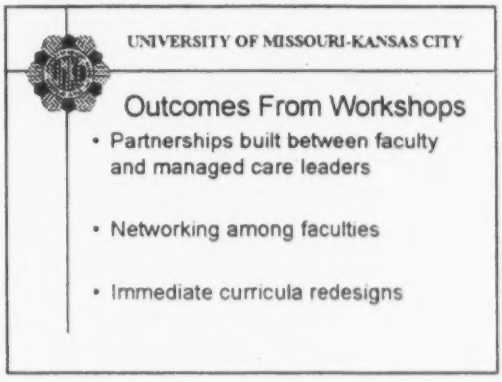

UNIVERSITY OF MISSOURI-KANSAS CITY
Content Day 3
• Case Studies in Managed Care
• Explore New Payors in Managed Care
Medicare, Medicaid, Commercial market, Disability, Workers comp, Federal systems, Employer expectations


UNIVERSITY OF MISSOURI-KANSAS CITY
Content Day 4
• Concepts of Financial Management and Budgeting in Managed Care
• Managed Care and Health Care Policy
• Nurses Role in Managed Care


UNIVERSITY OF MISSOURI-KANSAS CITY
Content Day 5
• Examine the Ethical Issues of Managed Care
• Relationship of Nursing Models to Managed Care Models
• Core Curriculum and Nursing Activities
• Interdisciplinary Component
• Curriculum Leveling

UNIVERSITY OF MISSOURI-KANSAS CITY
Year Two Adaptations
• Shorten the Workshop to four days
• Sessions to Focus on:
Disease State Management
Population Based Nursing
Nurse Case Management
More Case Studies

UNIVERSITY OF MISSOURI-KANSAS CITY
Mentorship
One Week clinical experience in a Managed Care Organization
Objective:
Nurse educators to experience the application of managed care concepts


UNIVERSITY OF MISSOURI-KANSAS CITY
Outcomes From Workshops
• Partnerships built between faculty and managed care leaders
• Networking among faculties
• Immediate curricula redesigns

Evolving Roles for Advanced Practice Nurses in the Market Place

JULIE MACDONALD, MS, *Vice President, Patient Operations*
Gunderson Lutheran Medical Center
LaCrosse, Wisconsin

Following on the next page is a summary of Julie MacDonald's presentation.

Program Session: Evolving Roles for Advanced Practice Nurses in the Market Place
Julie MacDonald

From multiple internal and external forces every dimension of the health care industry is under reform. And although the political environment in our country suggests that health care reform will take a number of years, the directions are very clear. Successful change in how health care is delivered will depend on the extent providers can demonstrate high quality, cost-effective care to individuals and populations in community settings.

The movement and realignments of traditional health care organizations into integrated delivery systems are vast. Recognizing that the concept of integrated delivery system development is in its infancy, the integration of providers and insurers is a key step in preparing for fuller capitated reimbursement and more managed care.

The characteristics of the models of health care delivery that are emerging align well with nursing's essential contributions and obligations to the society it serves. Market opportunities for role development, particularly of the advanced practice nurse, are immense. The changes required, however, will demand a reframing of the work and settings and a new level of collaboration between nursing service and academia.

Slides:

The Changing Landscape

- The Health Care Industry
- The Government
- Regulatory Agencies
- Health Care Consumers

The Changing Landscape

- Organizational Realignments
- Changing Incentives
- The Expanding Continuum of Care

Integrated Delivery System (IDS) describes different types of provider groupings and combinations intended to enhance the coordination of services and reduce costs.

Characteristics of the Emerging Health Care System

- Orientation Toward Health
- Population Perspective
- Intensive Use of Information
- Focus on the Consumer
- Knowledge of Treatment Outcomes
- Constrained Resources
- Coordination of Services
- Reconsideration of Human Values
- Expectations of Accountability
- Growing Interdependence

Pew Health Professions Education for the Future: Schools in Service to the Nation, San Francisco, 1993

Table 2-4. Managed Care: Stages of Evolution

	Stage I Event-Driven Cost Avoidance	Stage II Value Improvement	Stage III Health Improvement
Objective Function	Price	Value/customer satisfaction	Health status improvement
Cost Targets	Inpatient days	Resource intensity	Health risks
Locus of Control	External	Peer-driven	"Contract" with family
Focal Point	Inpatient hospital	Physician network	Home/neighborhood

The Managed Care Challenge for Nurse Executives, AONE, 1996

Shifts in Focus:

Multidisciplinary	to	Interdisciplinary
Coordination	to	Integration
Patient Choice	to	Value-based Decision Making
Diagnosis and Management	to	Care and Life Intervention
Institution	to	Wall-less-based Care

Characteristics of Emerging Models

- Interdisciplinary Team
- Integration of Care
- Patient/Family Empowerment
- Case/Care Management
- Community/Home-based Care

...We are generally suffering from the confusion and ambiguity characteristic of a culture awaiting a new identity and direction.

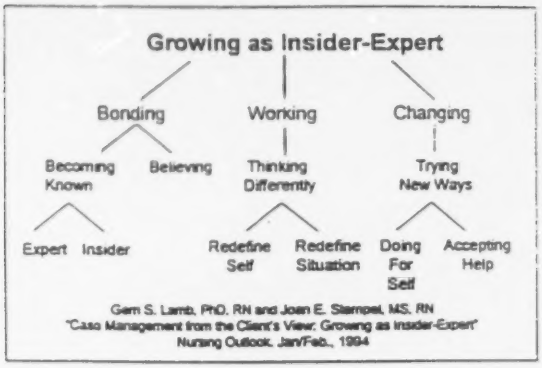
R. Bulger, MD
"Old Wine in New Bottles -
Nursing in the 21st Century"

When smart and practical people get in difficult times, they tend to return to the basics of what they do...to fundamentals and foundational principles...rebuilding on them step-by-step...a construction better fitted to the problems of the times and environment.

R. Bulger, MD
"Old Wine in New Bottles -
Nursing in the 21st Century"

...the role of the nurse is not based on any particular intervention or activity; rather, *it is the relationship between all clinical events and activities and their impact on the client's journey through the health continuum that defines the role of the nurse.*

Madden, M.J. and Prescott, P. (1994)
"Advanced practice roles in the managed
care environment," JONA 24(1):56-62



Broadening The Focus:

Acute –> Episode of illness –> Episode across continuum –> Disease/Health management across continuum

Impact on Nursing:

- Increased focus on outcomes: Quality and Cost
- More opportunity for jointly planning and delivering care within a team
- Alternative care delivery sites
- More options for advanced practice nurses
- Expanded opportunities for nurses to enter into risk-sharing and reward-sharing partnerships

Gundersen Lutheran

Emerging Advanced Nursing Practice Roles with Responsibilities Across the Continuum

- OB - High Risk
- Cardiothoracic Surgery
- Pulmonary
- Palliative Care and Symptom Management
- Geriatric

Example of Emerging Advanced Practice Role:

Palliative Care and Symptom Management Service Coordinator

Interdisciplinary Team

- Member of symptom management service team
- Facilitates discussion/decision making regarding patient and family needs with health care providers
- Develops and coordinates an interdisciplinary plan of patient care
- Establishes collegial relationships to enhance holistic approach

Integration of Care

- Participates in the development of care paths and standards of care for palliative care and symptom management
- Will function in role of palliative home care nurse for patients not yet receptive to and/or eligible for hospice
- Participates and coordinates educational activities that focus on symptom management across sites (hospital, clinic, long term care, rural facilities, etc.)
- Pain Resource Nurse Program coordinator

BEST COPY AVAILABLE

Patient/Family Empowerment

- Facilitates patient/family decision making regarding options for care
- Acts as advocate and navigator with system challenges

Care Management

- Serves as a case manager across sites for those patients who have complex needs and whose care and treatment are subject to frequent change based on their response
- Consultant to department-based case managers

Community/Home-Based Care

- Is aware of available resources for patient and family so that appropriate referrals are made in a timely manner (i.e. home health; hospice; support groups; community resources, etc.)

Focus of Emerging APN Roles:

- Caring for Both Individuals and Populations
- Interdisciplinary
- Functional Health Status of Patients
- See the Patient in An Expanding Context
- Care Less Institutionally Based
- Expanded Use of Care Paths/Protocols.Across The Continuum
- Advances Self Care
- Insider Role

To live in an evolutionary spirit means to engage with full ambition and without any reserve in the structure of the present, and yet to let go and flow into a new structure when the right time has come.

Erich Jantsch

In summary, these changes are occurring both by design and with a critical reflection of how the health care environment and the organizations within it are evolving. There is no cookbook approach to this design, as the story is being constructed as we speak. The direction and conditions are ripe for what organized nursing can bring to this movement and reform. As care delivery systems become integrated, so too must the work of nursing service and education. It is only then we can inform one another's practice in a way that takes full advantage of these changing times.

References:

American Academy of Ambulatory Care Nursing and the American Nurses Association. (1997). Nursing in Ambulatory Care. Washington, DC: American Nurses Publishing.

American Organization of Nurse Executives. (1996). The Managed Care Challenge for Nurse Executives. Chicago, IL: American Hospital Publishing, Inc.

Bulger, Roger J. (1996). "Old Wine in New Bottles - Nursing in the 21st Century." Journal of Professional Nursing, Vol. 12, No. 6: 338-348.

Cohen, Elaine L. (1996). Nurse Case Management in the 21st Century. St. Louis: Mosby.

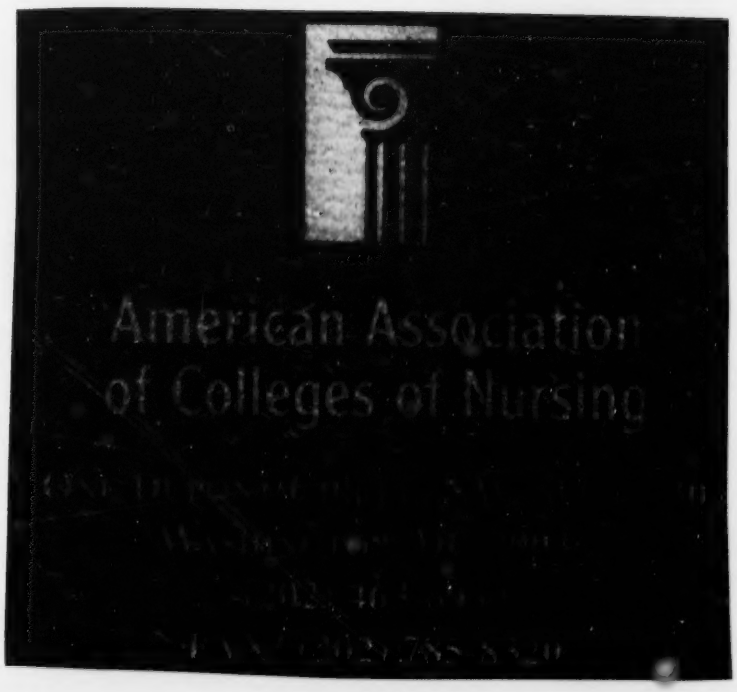
Doerge, Jean B., and Norma R. Hogenow. (1996). "Integrating Care Delivery." Nursing Administration Quarterly, 20(2): 42-48.

Lamb, Gerri S., and Joan E. Stempel. (1994). "Case Management from the Client's View as Insider-Expert." Nursing Outlook, Jan/Feb.

Madden, M. J., & Prescott, P. (1994) "Advanced Practice Roles in the Managed Care Environment," JONA, 24(1): 56-62.

Moorhead, S. (ed). (1997) Nursing Roles Evolving or Recycled. Series on Nursing Administration. (Volume 9) Thousand Oaks, CA: Sage Publications, Inc.

PEW Health Professions Commission. (1993). San Francisco: PEW Memorial Trust.



BEST COPY AVAILABLE